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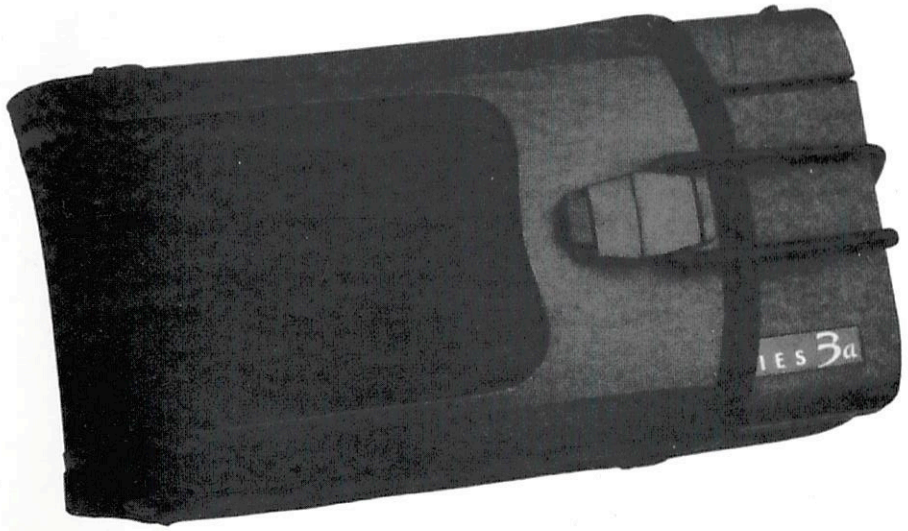
Palmtop

The journal for Psion Series 3 and 3a users

Issue 4, volume 1 July / August 1995



News, reviews, gossip, feature articles, programming, letters, hints & tips, tutorials and more...

...64 pages of up-to-date information on your favourite PALMTOP computer!

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Palmtop
The journal for Psion Series 3 and 3a users

Thanks...

Special thanks for this issue go to Chris Love at Clove Technology and Mark Needham at Widget Software for supplying various Psion cases for review.

Thanks also to all the contributors whose names appear within the magazine, particularly Andrew Baldwin for his regular programming articles and Pete Sipple for his numerous contributions and endless help and encouragement on the project. Also not forgetting my girlfriend, Rosemary, for so diligently proofreading the entire content of the magazine.

Address

All requests for subscriptions or back issues and any comments or criticisms regarding the content of *PALMTOP* should be directed to the editor at the following address:

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or: 100602.3723@compuserve.com

Submissions

Any contributions of material published within the pages of *PALMTOP* (excluding 'On The Net') will earn the author one free issue added to their subscription. If you wish to write feature articles for the magazine then please contact the editor to discuss your ideas. Any articles over 1000 words in length will earn one year's extension to the author's subscription, or a minimum payment of £30 (or foreign equivalent).

Back Issues

Back issues of *PALMTOP* are always available at £4 each within the UK, £5 each elsewhere. Just send payment in the usual way, stating which issues you require.

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General

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Editorial

On terms of processing power, screen resolution and storage space the specifications of the Psions are almost laughable when compared with the current state-of-the-art in the computer world. That doesn't make them any less useful though. The computer world has always been filled with so much 'my 486 is faster than your 386' mentality—has no-one ever asked you 'what kind of processor does it have?' Perhaps if you said there was a *Pentium* inside then they would take your 'Organiser' more seriously.

The term 'Electronic Organiser' makes me cringe each time I hear it, at least when used in reference to Series 3/3a's. I appreciate that Psion's last generation of Organiser II handheld's probably did much to bring the term into common usage, but I don't believe the description is appropriate any more. Okay, so a 3a is supremely good at *organising* your life, granted—but it is so much more besides. Referring to a Series 3 in this way is surely analogous to describing a Swiss army knife as merely 'a blade'. While adequately describing one of its primary functions, such an explanation of the tool does a great injustice to its true functionality, and misses the point in many areas.

I was immensely irritated to read a footnote to a short article in a mainstream computer magazine some weeks ago, discussing the selection and use of palmtop computers. The main article made good sense, but the whole thing fell down on the strength of a small 'sidebar' (written by a different author), suggesting that any such machine (be it Series 3a, *Apple Newton*™, or the like) was most unlikely to save you any time or improve your efficiency in the long-term, citing the fact that you would probably be unable to access the information needed at the crucial moment, due to either problems with battery power (!?), 'booting' problems (even more intriguing), and other such nonsense. The author also claimed that users spend many of their Saturday mornings transferring information from scraps of paper to their 'organiser' in any case, thus consuming the extra time the machine would otherwise have saved.

That author was right to be sceptical about the utility of handheld computers, but spoiled his credibility by making a sweeping and ill-informed statement about the genre. His technical errors notwithstanding, he was principally guilty of referring to our omnipotent little Swiss army knife as little more than a poorly sharpened blade.

Steve Clack - Editor

Palmtop News

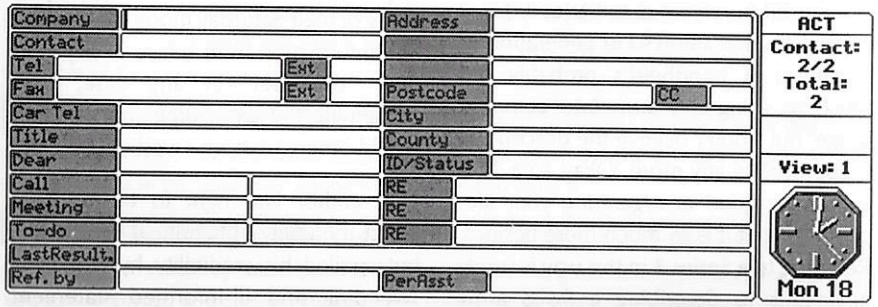
The latest hot gossip on what's happening in the Psion world

New products due...

New products due for imminent release are Autoroute (for the UK only) and the Series 3a version of ACT!, the contact management package. Both are likely to be released in October, with Autoroute supplied on a 1Mb ROM SSD at £69.95 including VAT, and ACT! on PC floppy disk at £89.95 inc. VAT. A SSD version of ACT! will follow in November, at £99.95.

Fax software at last!

Software to allow Psion's 3Fax program to be used with non-3Fax modems is due for UK release in October. This package has already been available in the USA for some time, but other users have been frustratingly made to wait. Psion have apparently been holding back for the initial surge in European sales of the 3Fax hardware to drop before opening the floodgates for use with third-party fax modems. Full details will hopefully be incorporated in a full review in the next issue of Palmtop, but the software will be priced at £49.95 inc. VAT.



One of the data input screens in ACT! for the 3a

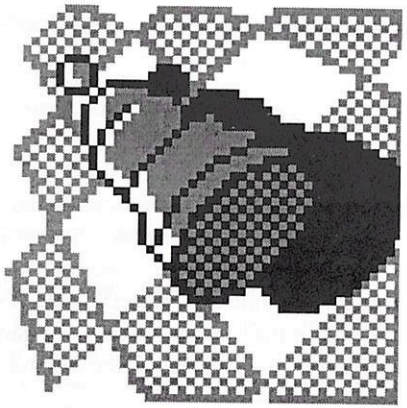
Symantec, the producers of ACT!, are apparently taking advance orders for the disk-based product now. Symantec can be reached in the UK on +44 (0)1628 592320.

More games from Psion

Psion will release yet another games pack in time for the Christmas rush. Details are not available at present.

...And Chess from Purple Software

Hot on the heels of their new ToolKit 1 (reviewed in this issue), Purple Software will be releasing a Series 3a chess simulation in October. More details in the next issue of *Palmtop*.



CompuServe cuts on-line charges

As of 10th September, the major world-wide on-line service provider, CompuServe, has announced further cuts in its pricing policy. This is of particular interest to Psion owners, as apart from numerous other non Psion-related services CompuServe has a large and active forum for the discussion of palmtop computers. This includes a specific area for Psion-related topics, and hundreds of messages are posted every week by Series 3 and 3a enthusiasts. The extensive library area includes hundreds of files for download, and is updated with new material on a daily basis. See Pete Sipple's article on getting on-line in issue 1 of *Palmtop* for more details of what on-line services such as CompuServe have to offer.

CompuServe Sales can be contacted within the UK on 0800 289378, or +44 (0)117 976 0681.

Major Psion dealers get on the World Wide Web

As the Internet expands and becomes accessible to more people around the globe, so an ever increasing number of companies are using the 'World Wide Web' as a means of advertising their wares and keeping their customers abreast of new products and services. To this end two of the major UK dealers, Widget Software and Clove Technology, have recently announced World Wide Web sites. For those with WWW access, these are at the following addresses:

Widget Software:
HTTP://WWW.WIDGET.CO.UK/

Clove Technology:
HTTP://INTERTRADER.COM/COMPUTERS/CLOVE/

Palmtop is scheduled to have its own WWW site within the next few months, so look out for us on 'The Web' soon!

New approved Psion repair centre

A new 'Psion approved' repair facility has been set up in the London area by Mr Paul Pinnock. Paul, previously an engineer with Psion, offers fast and friendly service at competitive rates. Contact:

POS (Pinnock Organiser Service)
25 Leigham Avenue
Streatham
London SW16 2PR
Tel: 0181 677 9246 or 0831 194985

New BBS for Psion users

A new electronic Bulletin Board System aimed at Series 3/3a users has recently been established in the UK. The 'Datalink BBS' offers more than 600 files of shareware and freeware for download and is operational 24 hours a day. Full membership costs £20 for a year, but guest access of 10 minutes per day for up to two weeks is allowed so that you can try out the system before subscribing.

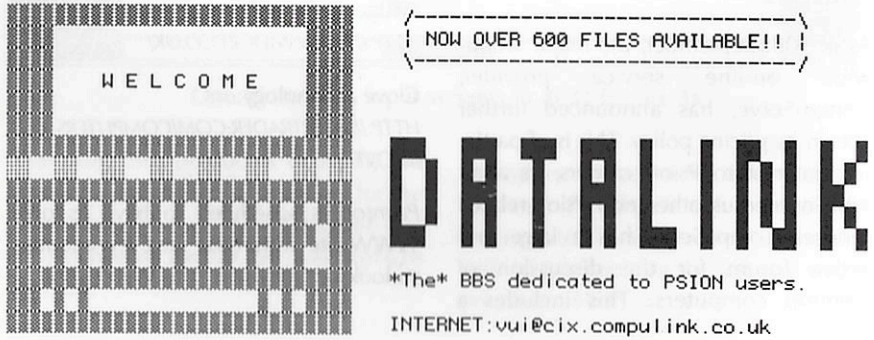
The BBS is regularly updated with new files and includes other information and resources of interest to Psion users. Users with modem access can call up the Datalink BBS directly on +44 (0)1202 660838.

FirePic to become freeware

Andrew Baldwin's shareware printing utility, FirePic, will shortly be re-released as freeware. As described in the 'Something to Draw on' article in issue 3, both *Draw2.8* and *Palmtop Picasso* drawing programs require FirePic in order to import and export .PCX files. It is also planned that FirePic will support additional file formats in the future, allowing these two programs to handle .BMP files and others.

Microsoft Mail client planned

Psion are planning to introduce Microsoft Mail client software for the Series 3a before the end of 1995. This will allow the 3a to interface directly with the popular e-mail system used by many companies. Further details are not available at present.



Shareware Shorts

New shareware for the Series 3 and 3a is being released daily. As a new regular feature to *Palmtop*, Pete Sipple updates us on some of the newest additions to the already vast collection of low cost software - 'Shareware Shorts' . . .

Electronic books for 'Reader'

Several new book titles have been released for use with Reader, by Barry Childress (discussed elsewhere in this issue). If you enjoy using your Series 3 as an electronic book, you may want to look out for the following:

'Around The World in Eighty Days' and 'Twenty Thousand Leagues Under the Sea' by Jules Verne; 'War of the Worlds', 'The Time Machine', 'The Invisible Man', and 'The Island of Dr Moreau' by H G Wells; Plato's 'Timaeus', 'Phaedrus' and 'The Republic', as well as Robert Louis Stevenson's 'Treasure Island' and the Washington Irving classic 'Legend of Sleepy Hollow'. Files are supplied in the Reader compressed format, ready for direct download into your Psion.

Yet another JBData update

Users of JBData, reviewed in *Palmtop* Issue 2, may be interested to know that version 1.4 was released in mid August. JBDATA14.ZIP fixes some minor bugs and includes some small enhancements, and it's still freeware! Two other programs from the same author are now being distributed, JBBACK11.ZIP (a backup routine for use with RCOM or similar 3-Link programs), and JBLAUN25.ZIP (a program launcher for the Series 3a).

Anyone for Crosswords?

For crossword addicts, CrosWord v1.95, a crossword puzzle creator and player for the 3a, is now available. Several bugs have been fixed from previous versions, and all files can now be installed onto any drive. Two demonstration puzzles are supplied. The file name is CW195.ZIP

Banking programs

New versions of two popular bank account management packages were released in August. S3aBank version 1.5B

includes Quicken™ compatibility, fuel consumption plus investment and expense account management. Version 1.2 of the small, easy-to-use BankPlus includes enhanced support for international currencies, as well as improvements to standing orders and on-screen statements. The shareware titles are S3ABANK5.ZIP and BANKP120.ZIP **(say Pete, isn't BankPlus *written* by you? I really shouldn't let you 'plug' your own software here you know! - Ed.)**

rette consumption. Data can be displayed in months, weeks, days, hours, and average days.

New shareware can be obtained on disk from Steve Litchfield's *3-lib*, from the new Datalink BBS (see page 6 for details) or for those with access to a modem, from on-line services such as CiX and CompuServe.

Pete Sipple

Mr Litchfield's at it again - Mapper London

More Mapper...

Steve Litchfield, author of Mapper, has just released a special version covering the Greater London area. Done to 100m resolution, it includes A-roads, tube (subway) stations, youth hostels, theatres, hotels and places of interest complete with telephone contact numbers.

Psion for health!

Finally, the health conscious may want to look out for POCDOC.ZIP, an electronic diary for monitoring such things as blood glucose, cholesterol, weight, and cigarette consumption. Data can be displayed in months, weeks, days, hours, and average days.

Apology

Again I must apologise to those who have written to *Palmtop* but have not yet received a reply. I will try to respond to everyone as soon as I am able.

In the meantime I am always happy to answer questions by telephone during evenings from around 7-9pm, or during the daytime at weekends - Ed.

Shareware ??

Many of our readers may be unfamiliar with how to obtain the enormous amount of shareware and free software available for the Psion Series 3 and 3a machines.

Apart from downloading the software from electronic bulletin boards and online services such a CompuServe and CiX, perhaps the most exhaustive catalogue of software is held by Steve Litchfield's '3-Lib':

3-Lib offers either a collection of a couple of hundred of the very best shareware programs as a standard set on floppy disk, or selected files from the entire 3-Lib archives (currently around 1000 programs) on floppy disk or Flash SSD.

If you would like more information on 3-Lib then please contact Steve Litchfield directly at the following address (note that Steve has recently moved):

3-Lib
22 Grays Crescent
Woodley
Berkshire RG5 3EN
ENGLAND

Tel: +44 (0)1734 265081

E-mail:
slitchfield@cix.compulink.co.uk

or send a Stamped and self-address envelope for more details.

Competition Results

Here are Vic Marden's top 10 shareware and freeware programs:

S3ABANK - Home accounting software, "without which my financial affairs would be a mess."

JBDATA - The well-loved database application (see *Palmtop* issue 2).

JBTREE - The freeware file manager (see elsewhere in this issue).

KMAC - Macro processor, see issue 3 of *Palmtop*.

CHARM - A small utility to display all the special characters listed in the Psion user manual.

INSTALL - To restore your settings and preferences after a system reset.

MEMOFIND - To search your memos within WORD, reviewed in issue 3.

JBSEARCH - The third program by John Boyce, for tracking down files by their contents.

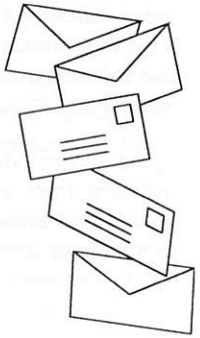
MAPPER - The UK geographical information system reviewed in this issue.

CONVERT - By Tim Bentinck. Converts units of measurement, etc.

A copy of Psion's SoundMaster goes to Vic for his 'Top Ten' listing.

Readers' Letters

The best letter submitted for issue 5 will receive a FREE copy of Kuma's book "The 100 Most Frequently Asked Questions For You And Your Psion Series 3a & 3", as reviewed in issue 1!



PRIZE LETTER - Paul Lippi wins a FREE copy of Psion's *SoundMaster* software for his letter below. Yes, Paul also won the competition in the last issue—so everyone else had better start writing...

Dear Palmtop

You may be interested to know that despite being generally very happy with my Psion 3a, I would probably own a HP200LX palmtop if it were not for an accident of circulation management. At the time I was planning to purchase a handheld computer I managed to narrow my choice down to either the 3a or the Hewlett Packard 200LX, but couldn't get detailed information on either machine from any of the mail order houses in the U.S.A. In order to get a better idea what palmtop computing was all about I ordered one year's subscription to the 'HP Palmtop Paper', a Hewlett Packard-specific magazine. Well, the blurb said that I should 'allow 4-6 weeks for my subscription to start'—mine took 26 weeks! In the meantime I lost patience, found an informative dealer in the U.K. (Clove Technology), and purchased a Psion instead.

Although I've had the 3a for nearly a year now, some days I could sell all of my Psion hardware and replace it all with the rival system. Granted the human engineering of our machine is superb: two SSD drives are wonderfully convenient and available software is more than adequate for my needs, but there is a dearth of peripherals and accessories. When it comes to flash memory and connectivity our precious Psion lags several years behind some of the competition. It's ridiculous that I need 3 hours to back up a few megabytes onto a borrowed Macintosh computer.

Paul Lippi
Jerusalem, Israel

Wow! I hope it never takes *me* 26 weeks to respond to a subscription. I agree wholeheartedly about the hardware though. Looking through the third party advertisements in the copy of the HP magazine you kindly sent to me I'm amazed by the quantity and range of the hardware add-ons available for the HP200LX—everything from 115Kbps wireless serial links and 80Mb flash RAM cards to PCMCIA send *and* receive modems, all at 14,400bps. I could be tempted towards *any* half-decent machine with all those slick and reasonably priced accessories. The thought of a wireless printer link or sensibly priced memory expansions are a powerful lure, and in the mid-1990s the prospect of spending several hours backing up a couple of megabytes seems crude in the extreme.

What do our readers think of the quality of Psion peripherals in general? Do you feel that infra-red printer links are a valuable accessory, or just an unnecessary gadget? Also, do you think that the price of SSDs is reasonable and fair, or are Psion using the fact that we are a 'captive' market to bleed the maximum amount of cash from us in return for the extra storage space many of us so desperately need? Let's have your views - Ed.

Dear Palmtop

Has anybody thought of a way of introducing a little more accuracy into the clock on the Series 3a? My problem is that I use my PC to capture Weather Fax broadcasts of meteorological maps and satellite pictures using a short wave radio. These maps are normally broadcast at fairly precise times and I would like to use the alarm on my 3a to alert me of their impending arrival. My Series 3a clock gains 18 seconds regularly each week, and it occurs to me that there should be some way of programming the regular alteration of the clock at a chosen time on a regular basis.

Also, although I cannot guarantee this to work every time, on both the occasions when I have had to replace the battery in my RAM SSD, I have successfully done so without losing any of the data! I have always done it in less than 10 seconds, so you must have the new battery unwrapped and ready to go as soon as the old one is removed. This may not be completely reliable, but if it works it does save you the trouble of reformatting the disk and restoring from a backup.

Peter Ogden-Smith
Bishopton, Scotland

I'm sure I would have noticed if my own 3a clock had been inaccurate by anything approaching 18 seconds per week Peter—it sounds like you have a bit of a rogue there. Has anyone else experienced similar problems with the accuracy?

On the 'battery dodge', it all sounds pretty risky to me, although I suppose you've nothing to lose provided that

you have done a full backup beforehand. NEVER, NEVER try anything like this without the backup though! - Ed.

Dear Palmtop

I have a question for you: The new 1Mb and 2Mb 3a's have the Spell Checker and Thesaurus built-in. Is it possible and legitimate to reverse engineer them into a 512K or 256K machine, and if so, how?

Steve Robson
Reading, Berkshire

No Steve, absolutely not. Whereas the 'reverse engineering' would probably require nothing more than copying the files off the internal ROM (though I know of no straightforward way to do this), this would infringe Psion's copyright on the software. When you buy a 1 or 2Mb 3a you are paying for the Spell Checker and Thesaurus as part of the 'package'. Another example of this is the original Series 3 machine and the more recently introduced '3S'. The original Series 3 did not include a spreadsheet program as standard, so Psion added the 3S to the range with the spreadsheet software built into the internal ROM. Needless to say the 3S was priced higher than the basic model.

The concept of 'lifting' the Spell Checker from a new machine is like upgrading your version of Microsoft Word (for instance) from version 5 to version 6 by simply copying someone else's disks and photocopying their manual. Whereas some people may disagree with a manufacturer's pricing policy regarding upgrades and improvements, that is really no excuse to break the law (though I'm sure that wasn't what you had in mind). The excellent Spell Checker and Thesaurus is still available from all good Psion dealers, and is (as far as I can tell) identical to the one supplied with the new machines. - Ed.

Dear Palmtop

What about a group test of bank accounting programs? Money is something close to everyone's heart, since plenty of it is needed to buy extras for the Series 3/3a. Steven Shone's article in issue 3 opens the bidding by putting the case for Psion's own 'Money' software, but as he says, there are a number of other packages on the market, at differing levels of price and complexity. I am currently getting to grips with the 'Quicken' bank account software on an Apple Macintosh, but am already wondering whether a similar package on the 3a might be closer to hand when needed.

Martyn Cadogan
Reading, Berkshire

A group test of all the major bank account/finance packages is already in preparation. It will probably appear in issue six of *Palmtop*. - Ed.

Dear Palmtop

In issue 3 you gave a tip on how to turn off alarms, i.e. you just close down the Agenda application. As an alternative, if you're in a meeting and would like your alarms to still work but would prefer the proceedings not to be interrupted by the Psion's fanfare, then you can just turn the machine's sound off entirely from the system screen (by hitting Psion-S and setting ALL SOUND to OFF). You can then turn it all back on after the meeting, and in this way all of the alarm messages will still display on the screen in the normal way.

Also, when I bought my first Series 3 about 3 or 4 years ago, part of the deal was that if you sent off the warranty card then you would get a 4 page newsletter (I can't remember the name) every couple of months. I only received one of these, but it was quite good, and was relevant to users. Psion User (which I presume is a replacement for this) is, in my opinion, just junk mail. It doesn't give any useful information, but just tries to sell you what you've already got. I would personally prefer Psion to subsidise *Palmtop* magazine and provide you with 'another way to use your Psion in a work environment' type of articles every issue.

David Morgan
Weston-Super-Mare, Avon.

So would I David. Psion have already been immensely helpful with Palmtop, but 'subsidise?' I like the sound of it. Subsidy cheques to be made payable to *Palmtop* please Psion, you can just leave the amount blank...

Joking apart, I still think Psion User is a maligned animal though—how can anyone complain about something that's free? Anyway, my main aim in life is now to make *Palmtop* into a 100 page monthly with the presentation and production quality of Psion User—then users will have the best of all worlds - Ed.

Palmtop Picasso

Apologies to the author, Ken Willan, for an error in my review of the Palmtop Picasso drawing package in the last issue of *Palmtop*. I mistakenly stated that Palmtop Picasso does not support the drawing of curved lines, whereas in fact it *DOES*.

Sorry Ken - Ed.

A Closer Look...

...at some of the newest and most interesting products available for your Series 3/3a

Autoroute 3a

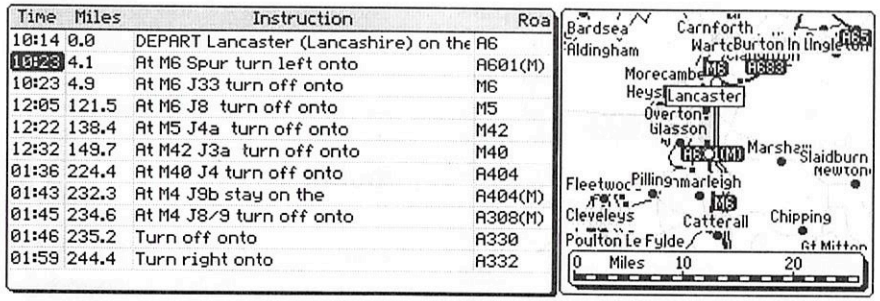
It's indicative of how popular the 3a has become that more companies are now developing software for it. This now even includes Microsoft, who have recently bought NextBase, who in turn have been working on a copy of AutoRoute Express for the 3a. For those unfamiliar with Autoroute, it is a 'geographical information system' designed primarily to evaluate alternative routes between destinations. For instance, if you want to know the best way to drive from London to Edinburgh then Autoroute will suggest the best routes based upon whether you prefer to travel on motorways or A-roads, whether you want to avoid certain roads or areas, make specific stops on the way and so on. Autoroute has been available for several years for PC and Apple Macintosh platforms, and now the 3a version is due for imminent release. Here's a look at a beta copy.

Map view in AutoRoute 3a

Clearly, given the screen and memory limitations of the 3a, this implementation of AutoRoute is not the same as the PC and Mac' versions. The most obvious difference being that the map incorporates much less detail and there are no separate overlays to show things like football pitches or traffic cameras. However, it is still reasonably detailed and covers the entire UK including the Irish Republic. You can set the program options to display place names, road names and ferries, or to have them switched off for a faster screen redraw. The level of detail for roads and places can be varied, and a good feature here is that you can interrupt the screen redraw process at any stage to access the menu options, which speeds things up considerably.

The Psion-I and Psion-O keys allow you to zoom in and out of the map, and at the maximum zoom level the screen displays an area approximately three miles wide. You can also pan across the display or go to a particular location by entering the place name into a dialog box. If you often make journeys between cities then the map is certainly very useful. However, once you get into the city this version of AutoRoute is of little use. Here a paper road atlas is of much more use as they usually have city centre route maps for the major towns and cities at the back.

The map is just one part of AutoRoute's arsenal, complemented and enhanced by its route planning facility. Here you can plan a trip and see information such as the expected journey time and fuel cost. The first stage in the process is to enter the start and end points into a dialog box. If AutoRoute isn't sure of either location then it displays a list of possible matches, allowing the user to choose the correct one. As well as straight 'A to B' journeys the software also caters for a maximum of four stops at any location, and you can specify how long you'll be stopped at each point, perhaps for a meeting. The dialog also allows you to specify whether the route should be the 'quickest', 'shortest' or 'preferred'.

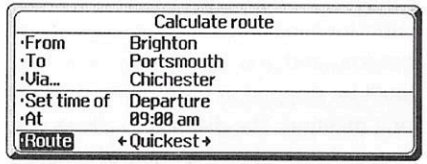


Split screen showing the route plan and map together

The first two are self explanatory, and the third option looks at the default preferences you've selected as to which road types you prefer. You can also specify which roads you would like to completely avoid—if you know of specific roadworks, for example.

Once you've selected your journey details the software then calculates the

best route based on your choices. The map shows this as a highlighted line, but you can also switch to view a table of directions or split the screen with the diamond key and show both. The table shows the departure time from each waypoint, section distance, total distance and instructions on which directions and roads to take. This table can be printed out directly or copied across to the 3a word processor.



Choose your route...

An interesting feature of the route planning aspect is that the section times and the overall journey times are taken from average speed details which you enter into a dialog box. All types of road are catered for here from motorways to B-roads and others. However, whilst this is useful in giving an approximate journey duration it of course depends on you maintaining that average speed, and even a stop for fuel can throw such averages out by quite a margin.

This beta version of the software is quite heavy on memory, requiring 100K of free space in which to run and around 30K more to plan a route. The final software is likely to ship on a ROM disk, although pricing has not yet been decided. So is this a program worth having on your 3a? Well, there's no doubt that NextBase/Microsoft have done a commendably good job in porting the program to the 3a platform and it's certainly very easy to use. But it's bound to be more expensive than a soft cover road atlas, and it doesn't have any city centre road plans once you've arrived at a city or town. If you're a frequent UK traveller and want everything in one place then AutoRoute is for you. But for most users an ordinary atlas is just as good, and is likely to be far cheaper.

Mark Houghton

InfoBOX

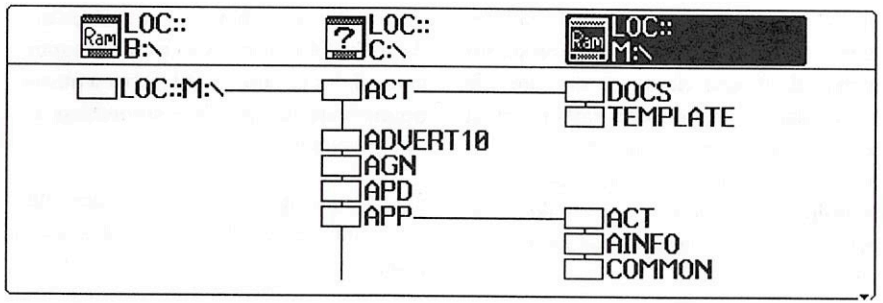
Autoroute 3a is likely to be available in October. Price will be £69.95 on SSD. It will not run on the Series 3 'Classic' machines.

ToolKit 1

The latest offering from the Purple Software stable, ToolKit 1 incorporates four useful utilities rolled into a single package.

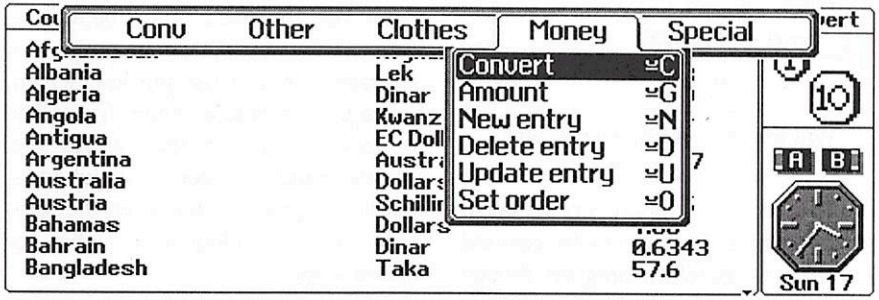
Existing owners of their previous 'File Manager & Convert' software will find little to justify the cost of the new package however, as these two programs form the main components of ToolKit 1, and have changed little since the earlier versions.

The File Manager application has long been my most valued piece of software



The clear and straightforward interface of Purple's File Manager

for the 3a. It is the most comprehensive file manipulation tool I know of and it is fast and intuitive to use. A full description of the features of the File Manager appear in the comparative article later in this issue, but the program essentially allows easy copying and moving of files across drives and directories, and gives useful information on the status of each drive. The new version (3.01F) has an improved 'Locate' feature, which allows filenames or files containing specific text strings to be located across ALL drives. In this way you can track down all filenames that contain the word 'REPORT', all those with the extension '.SPR', or all files containing the word 'Paris' *within* the text of the file itself. This facility was included in the previous version of the program, but did not allow all drives to be searched at a single pass. It now works more like John Boyce's freeware 'JBFind' utility, though is still much less sophisticated in most areas. The other difference in this latest version is that all setup information is saved when exiting the program, so all of your preferences are still in effect when you next run File Manager.

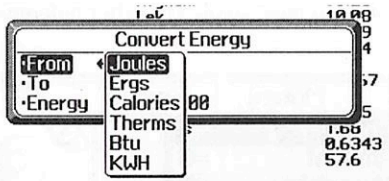


Now how many Bahranian Dinars are there to the Albanian Lek?

Overall this is a thoroughly recommended utility, and in my opinion justi-

fies the purchase of ToolKit 1 without even considering the other programs included. If you do most of your file manipulation on the Psion (rather than at the PC end) then the File Manager adds many useful functions unavailable in the built-in file selector, and makes the process much more pleasant and straightforward.

The second program in the suite, 'Convert', gives quick conversion between various units of currency, length, area, volume, fluid, weight, speed, pressure, temperature and energy, plus conversions between British, European and American clothes and shoe sizes, tax calculations and hexadec-



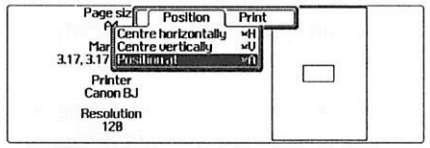
Will that be Joules or Ergs, Sir?

imal/decimal/octal/binary conversions. All common units seem to be covered within the scope of the program, though there is no facility to add new units or conversion types. This is a retrograde step from the old Psion Organiser II, as an excellent program (known as 'Formulator') was available which allowed any conversion formulae to be added to the enormous selection already included. Convert has everything the average person is likely to need, but those in technical professions are likely to find it too limited. There must be a real market for something of the power and flexibility of that old Organiser program. Overall this is a useful utility, but a missed opportunity to provide something far more flexible and powerful.

The remaining two utilities require little explanation or discussion, but are useful programs nonetheless. The first is 'PicView', which allows viewing and printing of common graphic file formats from the Series 3/3a. It covers Windows™ .BMP, .PCX and CompuServe .GIF formats, and of course Psion's own proprietary .PIC format. These features are included in some of the better drawing programs for the Psion, but PicView removes the need to use one of these. It works simply by selecting the desired filename from the usual file selector dialog box, and then pressing the 'enter' key. The image cannot be manipulated in any way, but can be positioned accurately on a page preview screen before being sent to a printer. The ability to convert *between* the various file formats would have been a useful addition to the program, but again the software performs adequately within its limited scope.

The fourth part of the quartet, 'ScnPrint', allows a printout to be made from ANY screen image as viewed on the Psion. It uses the same page layout options as PicView, and once these have been set you can obtain an instant printout of any screen image simply by pressing Psion-Shift-Control-Y when the desired screen is displayed. This would also be possible by using the Psion's built-in feature of

pressing Psion-Shift-Control-S (which will dump a file called 'SCREEN.PIC' into the root directory of the internal drive) and reading the resulting file into the PicView utility. ScnPrint usefully simplifies this process though, making it a two second task. Sadly, the lack of any ability to merge text with the pictures makes the production of composite documents



Print preview in PicView and PcnPrint

impossible, but this is more a limitation of the Psion itself than with ScnPrint. ScnPrint is perhaps of most use for printing out spreadsheet graphs or for producing printouts from programs that have no print feature of their own. A good range of print drivers are incorporated into the ToolKit 1 programs, allowing printing to Canon BJ10, Canon BJ30, IBM Proprinter, General Epson, HP Laserjet and Postscript printers.

The vast majority of users will purchase ToolKit 1 on the strength of needing the features of the File Manager. This is really the core program of the group, and for most people the other utilities are just window dressing. If you find that the Series 3/3a's built-in file selector is adequate for your needs then you probably don't need ToolKit 1. If you do a lot of file manipulation (perhaps loading shareware programs to try out) and you find its lack of features and non-graphical interface tedious and inflexible then you may (as I do) find that the Purple Software File Manager is one utility you simply can't live without.

Steve Clack

InfoBOX

ToolKit 1 is available directly from Purple Software or from major Psion dealers at £49.95 on SSD.

Shareware CD-ROM

As all *Palmtop* readers should be aware, shareware is a goldmine for Series 3/3a users. Applications have been produced by both professional and amateur programmers to cater for all sorts of users and all sorts of interests. The chances are that if you'd like your Series 3/3a to fulfil a specialist task then someone, somewhere has written software for the Psion to do the job. There are several ways to get your hands on this wealth of goodies, one of which is 'CD4PSION', a CD ROM crammed full of Series 3/3a shareware and freeware.

The cover of the CD boasts 'over 400 shareware programs prepared for direct installation on your Psion', which means that if you have access to a PC's CD ROM drive and a 3Link serial lead then this could be just what you've been looking for.

The disk, produced in Austria, contains an impressive 47 Megabytes of shareware including a wide assortment of useful programs ranging from project managers to biorhythm plotters, as well as a host of games, sound files, pictures, conversion utilities, icons, printer drivers and programming tools.

Installation of the software is pretty straightforward. The interface is entirely DOS-based and can be run in a Windows DOS session if required. The Install program requests that you specify Series 3 or 3a, and the preferred language (English or German). Quite why it does this is a mystery, as the version I have then proceeds to give installation instructions in German first, and then in English.

Once successfully installed, the user is presented with a list of 426 programs with one line descriptions, which have been unzipped ready for installation straight onto a Series 3/3a. After entering the program number, the following message appears:

HABEN SIE MIT [PSION] [P] DIE RECHNERKOPPLUNG EINGESHALTET ?

Press any key to continue...

...which presumably is the (German) prompt to engage the remote link at the Series 3/3a end. Provided the Psion link is established, the files transfer over smoothly and into the correct directories of your Series 3/3a, although no provision is made for a 3Link being connected via either COM3 or COM4.

At first glance, this professionally produced CD ROM would appear to be a treasure trove of Psion utilities squeezed so tightly onto the disk that not a free byte remains... however, all is not as it seems.

After a closer inspection of the disk's contents, some interesting facts become evident. The disk contains:

- 428 unzipped programs ready to install straight onto your machine.
- 709 Psion-related files (including the zipped versions of the 428 programs)
- 44 Psion-related DOS-based programs, such as RCOM (file transfer), S3TRAN/S3ATRAN (OPL translation module), and the emulators.
- 164 WVE sound files (totalling 2.4Mb)

However, the most concerning statistics relate to the inclusion of a LOT of duplicated material...

Of the 4915 files on the disk, over 800 of them are duplicates.

The disk contains several versions of the same software. For example, RCOM takes up nearly 4Mb of the disk's 47Mb. There are four identical versions of RCOMD.EXE. You will also find six identical copies of TIMELOG.OPA and CONVERT.OPA

Each of the ready-to-install programs also include the zipped version. This enables complete versions of the software to be re-distributed, but may be considered by some users as unnecessary.

Several screenshots of the Series 3a have been included. There are three copies of every GIF, but only one copy of most of the PCX files.

I was pleased to see that some of my own shareware programs had made it onto the disk, but slightly surprised to find that there were four different versions of my bank account manager, in both zipped and unzipped format, all of which are now out-of-date.

I was also surprised to find that over 3.2Mb of the disc was filled with an assortment of Windows-based WAV editors and other sound tools, including an impressive looking program called 'The Drums'. There is no explanation as to why these non-Psion related files are there, but they are interesting nonetheless.

The disk also contains two identical versions of both the Series 3 and Series 3a emulator. Both versions of the Series 3 emulator are the English version, and both Series 3a emulators are German-language versions only. This strikes me as a serious oversight by the disc's producers.

Looking through the file listings and running my duplication software over the disk I got the distinct impression that the compilers had worked hard to pack as much information on as possible. Whether the inclusion of so many duplicate files is by accident or design is unclear. Certainly, users may be lulled into believing that there is a lot more material on the disk than there actually is.

The Series 3a Emulator—German version only

Out of curiosity, I looked through several of the PC-based programs and stumbled across one very interesting program that I had not seen before. Titled 'Demo', the program is a VGA slide-show demonstration, which is presumably used as a sales tool to demonstrate the Series 3a's flexibility on a PC. Sadly, only the German version is supplied on the disk. I, for one, would love to get hold of the English version of this.

There should certainly be something of interest for most Psion users on this disk, however, only the 428 ready-to-run applications are available from the main menu. To access the other files on the disc, users will need to browse through the CD's directories using a package such as DOSSHELL or Windows' File Manager.

The disk is labelled as 'Volume 1', with a note on the CD inlay suggesting that shareware authors who wish their programs to be distributed on the next CD should send a disk plus a short description of their software to the authors in Austria. Attention is also drawn to the fact that there are no guarantees that the programs distributed on the CD are either error free or functional.

Although CD4PSION was produced relatively recently (October 1994), many of the files have now been superseded, and most of the more recent additions to the shareware range, such as Steve Litchfield's Mapper, are sadly missing. Users who are looking for the most up-to-date software will probably want to look at other sources such as 3-Lib or online service providers such as CiX and CompuServe. However for those new to the world of Psion shareware and who have access to a CD ROM drive, this disk is worth considering.

To run CD4PSION you must have a PC with a VGA colour monitor, CD-ROM drive and DOS 4.0 or higher and a Psion Series 3/3a and a 3Link.

Pete Sipple

InfoBOX

The Shareware CD-ROM is available from major Psion dealers at around £39.95 including VAT.

Pentax PocketJet portable printer

Notebook PCs are often referred to as 'portables', and whilst such machines can be used away from mains power they don't feel very portable after you've been carrying one for a few hundred yards. This is perhaps why so many of us use a 3a. The same is true of most portable printers, which are bulky and quite heavy—especially when you've got to lug around a notebook as well. Fortunately, the same cannot be said of the Pentax PocketJet. Weighing in at only 225 grammes it's incredibly light and small, with a cigarette packet sized cross section and little wider than a piece of A4 paper, which makes it one of the smallest A4 printers in the world.

So how have Pentax done it? Well, they've gone for a thermal print mechanism rather than the inkjet technology more common in modern portable printers. This results in fast print speeds because the printhead extends the full width of the paper. It also makes it very quiet and unobtrusive. The downside is that it will only work with thermal paper, with a box of 100 sheets costing £6. To be fair though, it's unlikely you'll be printing thousands of copies on such a printer, so costs of 6 pence a page are

probably not too much of an issue, especially when you don't have to buy replacement ink cartridges. But the use of thermal paper does mean that you can't print onto preprinted company letterheads or forms.

Paper handling is quite good. Sheets are fed by hand into a slot on the top of the printer until they are gripped by the paper feed roller, and they then exit through a slot at the front. Luckily there are no problems in getting the paper fed in completely straight and the whole process is trouble free and clean, with no ink cartridges to leak during transportation.

The machine comes with an internal NiCad battery which lasts for around 30 pages and a small and especially lightweight mains adaptor/battery charger. One good feature here is that you have to manually set the adaptor in order to charge the battery so you don't get the memory effect of constant partial charging which plagues NiCad batteries.

The PocketJet offers HP DeskJet printer emulation, so connecting and printing correctly from your 3a is no problem. And despite the thermal print head, the 300dpi print quality is surprisingly good. Okay, curves do look a little jagged, but it's impressive nonetheless and does a commendably good job on spreadsheet graphs and the like. It prints at up to 3 pages per minute—more than acceptable for any portable printer.

The printer has a RRP of £399 which does make it substantially more expensive than something like a Canon BJ10ex, but it is supremely portable and may just

fit the bill if this is high on your list of priorities. It only has a parallel (Centronics) port as standard, so you will also need the Psion parallel printer adaptor in order to connect it to your Series 3 or 3a.

Mark Houghton

InfoBOX

The Pentax PocketJet is available from selected computer dealers at around £399, or you can get more details by contacting the UK distributors directly:

Europatec Ltd,
50 High Street,
Edgeware, Middlesex HA8 7EP
Tel: 0181-951 4665

Backgammon

Backgammon, reported to be the oldest game in history, is now the newest game to be transferred onto the Series 3a.

For those not familiar with the game, the rules are relatively simple. Two players take turns to roll two dice, and move their counters accordingly. The object of the game is to move your counters across the board into your home area, where you must remove all fifteen pieces before your opponent removes theirs. Counters can be 'taken', thus preventing an opponent from making a move until an appropriate dice roll. Throwing a 'double' allows the player to make four moves of the value shown on the dice. As a general rule, the more 'doubles' that Lady Luck bestows, the faster you can move your counters into your home area.

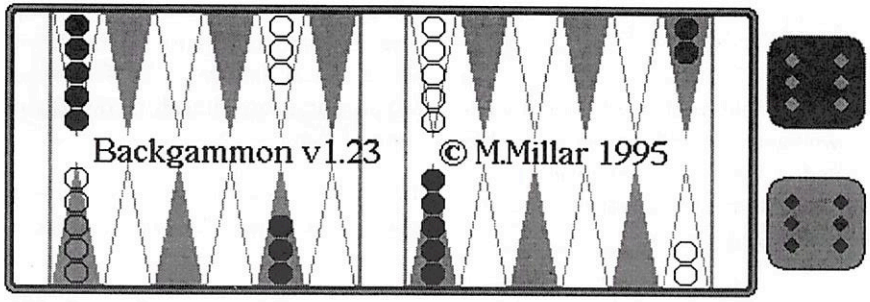
The game has grown in popularity over the centuries, as it combines strategy and the luck of the dice into a challenging and addictive game.

BACKGAMM for the Series 3a, written by Matt Millar, is a simply excellent implementation of this classic board game. It is simple to operate, but much less easy to master. Counters can be moved by use of cursors and spacebar, and the graphical layout is very easy on the eye.

The program will allow a two player game, pit you against a computerised opponent, or present a rolling demonstration by asking the computer to simulate both players. The program intelligently disallows any illegal moves, allows players to 'undo' a previous move, and will continue the game when it is not possible for a move to be made. Players may enter their name, and can at any time recall statistics of their wins and losses.

BACKGAMM is easy to install, and comes complete with an installation script for users of RCOM. Two optional WVE sound files are supplied, and these are very realistic sounds of rolling dice and of counters being moved.

Even experienced backgammon players may be unaware that there are two sets



Adorn your 3a with the latest version of Backgammon

of rules to the game. The British rules, compiled in the mid eighteenth century, which dictate that no more than five pieces are allowed on one point, and the modified American rules introduced fifty years ago, which place no limit on this number. BACKGAMM allows for both rule sets, but uses the more common American rules by default.

I could only find one criticism, which relates to the 'thinking time' of the computerised opponent. Whilst most moves are made within a few seconds, some rolls cause the computer to 'think' for anything up to nearly two minutes, although some improvements have been made to the speed in the latest version (1.23). The accompanying text file makes mention of this, pointing out that there are typically about 100 possible moves that can be made, and in the case of double throws the possibilities approach something in the region of 10,000 moves.

I am not generally a great fan of games on the Psion, but as a backgammon player I have to say that I have enjoyed the portability of BACKGAMM on my Series 3a, and I now have the chance to play a game traditionally enjoyed on a large board anytime, anyplace, anywhere. BACKGAMM is one of the best games that I've seen for the Psion, and is ideal for new or experienced players alike.

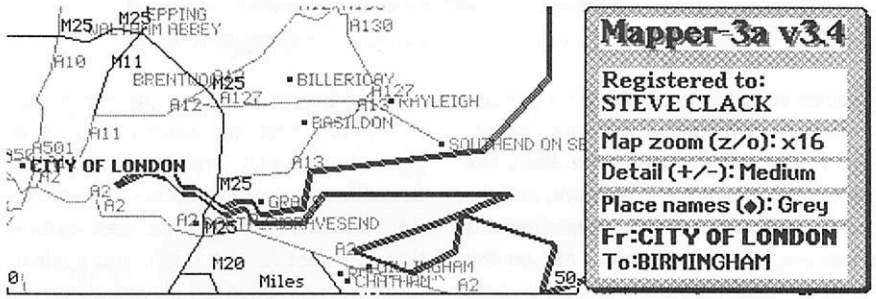
Pete Sipple

InfoBOX

Backgammon takes up nearly 90K of disk space, and needs around 43K of memory to run. It is available as Shareware from the usual sources. Registration cost is £15.

Mapper-3a (v3.4)

Steve Litchfield, probably the most well-known figure in the UK Psion world, has created a UK-only 'Geographical information System' of impressive scope and flexibility—Mapper-3a.



Mapper at medium zoom level, with the road overlay switched on

While some apology should be made in advance to our many overseas readers for whom Mapper (and Autoroute) is of no use or interest, anyone travelling to the UK from other countries will most certainly find this software a useful source of information to help orientate themselves in the country.

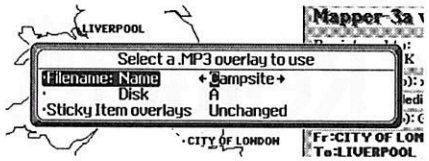
One of around 50 town plans

The inevitable question to be asked at this time must be 'how does Mapper compare with the forthcoming Autoroute package?'

The answer to that question is that they have *very* little in common. Uncannily it would appear that almost by design the two programs have virtually no overlap in terms of features.

If you are looking for software to tell you which route to take between two locations then Mapper is of very little use. Its route planning features are limited to merely indicating the straight line distance between two points, and the best it can manage is to show the major roads between the selected locations and allow you to guess the best journey 'by eye'. This, however, is not Mapper's brief. The 3a version of Autoroute has no town plans or overlays for places of interest, whereas Mapper 3.4 has these in profusion.

The strength of this program lies partly in the fact that it is in such a state of flux. Mapper has been through numerous versions since its inception less than a year ago, and new features and overlays are constantly being 'bolted on'. These files cover numerous items of interest like



Choosing an overlay

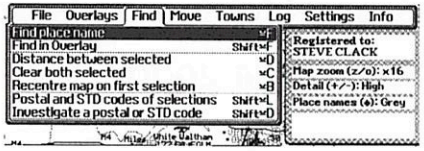
county boundaries, airfields, National Trust properties, castles, popular restaurant and hotel chains, etc. As each overlay is a small independent data file it is possible (and desirable) to customise your own installation of the program to suit only the features that are of particular use to you. If you have no need to know

Airfield and road overlays ON

the locations of all the UK TV transmitters then you just elect to leave out the corresponding overlay file. Failure to be selective in this way will take a heavy toll on your storage space, as the current version of Mapper includes more than 230 files covering around 130 town plans and 50 overlays, using around 400K of disk space! Apart from Psion's own spell checker and thesaurus (supplied on ROM only), Series 3a software just doesn't come any bigger than this.

A fairly minimal installation can be done with around 100K of free space however, and several of the overlay files cover quite specific items such as packet radio stations, Youth Hostels, theme parks, etc. Some sensible pruning here will probably reduce the average installation to something below a more manageable 200K.

Mapper has far too many features to describe in a short article such as this,



Menu options galore...

and the list will probably have doubled in the next six months anyway. The important consideration is that Mapper is NOT a substitute for Autoroute, just as the reverse is equally true. Anyone travelling extensively within the UK should consider using the two programs side-by-side, thought the combined space requirement is pretty horrendous. With well over 1000 registrations so far the success of Mapper very much speaks for itself, and the support and enthusiasm for the venture virtually assures that it will continue to grow and grow.

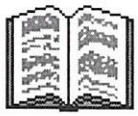
Steve Clack

InfoBOX

Mapper-3a (version 3.4) is available from the usual shareware sources as three zipped files: MAPA34.ZIP, MAPB34.ZIP and MAPC34.ZIP, or as an upgrade from previous versions as MAPPUP34.ZIP. Registration costs £14 and it runs on the Series 3a only.

The Perfect Reader

Poppy Holden curls up in front of the fire with a good book—on her 3a!

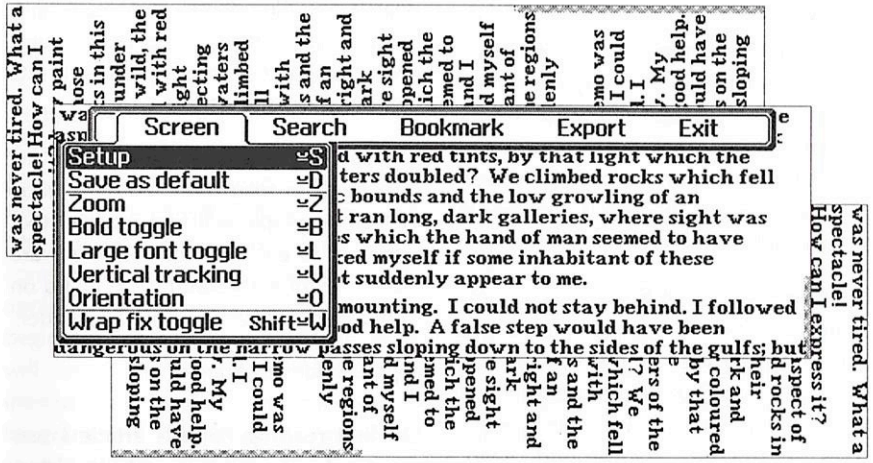


On January this year, before ever owning a Series 3a, and while reading the free CompuServe magazine, I noticed two items of interest on the Letters page. The first was from Skip Kennedy, giving details of his shareware program, 'As You Like It' (AYLI), an 'etext' (electronic text) reader for the PC which makes it easy to use the large collection of free electronic books available on the Internet. The second letter was from R. Steve Walker, 'President, Protronics Computer Systems, and Olympic Envoy to Dominica for the 1996 Summer Games'. He wrote that he had a Psion Organiser in which he carried up to eight novels, and read them wherever he happened to be, using a 'vertical reader'. As I was keen to explore the possibility of reading 'books' from a computer, I downloaded Skip Kennedy's program (to be found on the Internet at ftp.portal.com/pub/arslonga). I was enchanted with its ease and simplicity, and the space-saving text compression it used. However, it was tiring to read Sherlock Holmes novels at a PC for hours on end, and I longed for a more portable computer.

I looked around on the Internet and CompuServe for information about Psions, and discovered two very useful discussion groups populated by enthusiasts, gurus and Psion staff—CompuServe's Palmtop Forum (section 18 for general Psion information), and Usenet's comp.sys.psion; both have large libraries of shareware and freeware. After I'd read the Frequently Asked Questions (FAQ) section and hung around for a week or two it became obvious that the Psion was a very special little machine, capable of replacing most of the contents of my briefcase and pockets, and of carrying heaps of novels as well. When I saw one for sale in a large stationers' chain and realised it was truly pocket-sized, I decided to get one.

Although I had e-mailed Mr Walker to ask for help in setting up my machine, by that time he had been flooded with enquiries, and had arranged for a U.S. dealer to sell a Psion computer loaded with the text reader and a choice of novels for $399. I decided I'd have more control over things by going solo. With my new 3a connected to the PC on my desktop, I found and downloaded suitable text reading software and some electronic texts, and began to read: on the bus, at dinner, everywhere. many lines I wanted to jump back. Also, when reading at a desk, there was no way to display the text horizontally. The uncompressed texts were eating up a lot of RAM too—around 500Kb per novel, more than twice the amount on my PC.

It seemed to me that for reading novels on a well-filled Psion to be a real possibility, a few more features were needed.



Every which way—Barry Childress' excellent Reader 2.3i. What next, 2.3 Turbo?

Wonderful! Unfortunately, I found that compared with the PC-based text reader the 'Vert' software for the Psion was not a fully-fledged commercial product. It presented the text vertically down the screen, which made it very comfortable to hold the Psion one-handed like a book: paging down was as easy as a flip of the thumb on the spacebar. But if I read too fast and wanted to reverse, the only way was to turn the Psion around, press combined keys, and calculate how

After trying the various reader programs available, from the groups above and from Steve Litchfield's 3-Lib shareware library, I found that although they were all useful in breaking the 40Kb file size barrier of the 3a's built-in word processor, none were really easy to use. So, not being capable of doing it myself in OPL, I started a discussion in the two user groups, asking whether anyone had a compression program which could be combined with text-viewing software.

Over the next weeks, creative juices began to flow in response to the challenge: on Usenet, Ian Young carried Ewan Paton's 'Vert' program onwards by adding text compression. It still doesn't page back, however. Meanwhile I'd found Barry Childress' 'Reader' on CompuServe, which has many elegant features. It sets bookmarks, searches for text, autoscrolls, easily marks and exports text, displays in any font, and remembers where you left off. You can also select various styles of word wrap, and display text horizontally or vertically for left or right handed use. Paging forward or back is done with one keystroke: almost any key will page forward, and 'Esc' or 'Del' page back. It also handles CompuServe threads, although I haven't tried this.

The latest version of Reader (2.3i), only recently released, also includes the much-needed text compression. This is excellent: Ian Paton's compression was an overnight batch job, whereas Reader's takes 5 minutes for around 4Mb, shrinking the text file by half.

Judging by what I've seen so far this is a very good program which will be extremely useful to many Psion users. It reads any kind of text, from novels to your own business reports, and you can compress the text yourself on a PC or Macintosh computer. It's very well supported, and available across the internet from Barry Childress at 73510.1420@compuserve.com. If you're on CompuServe you can obtain it using SWREG, otherwise write to Barry at 3415 North Second Street, Harrisburg PA 17110, USA. He doesn't expect you to pay the $20 registration unless you like it. I've uploaded Reader.zip to src.doc.ic.ac.uk, and I have also sent a copy to 3-Lib.

The 'etexts' referred to are simply entire books in ASCII text format, and can be found on CompuServe (GO GUTENBERG, or GO STUFOB and look in the 'books' section), or on the Internet (search for 'Gutenberg' and you'll find, for example, http://info.cern.ch/hypertext/DataSources/bySubject/Literature/Gutenberg/Lit_Author.html).

My reason for pursuing this trail was my own need to read more books. I hope that other people will find it useful too. Certainly as each day passes, there are more cries of enthusiasm to be heard on CompuServe as people discover Reader.

Poppy Holden, London

On first reading Poppy's article I was sceptical about this whole idea. 'Reading' novels in this manner seemed such an unnatural concept that I couldn't imagine getting engrossed in a favourite book while reading it off a little LCD screen: hence I tried it for myself. Having done so I now have to say that I'm hooked too, and on my recent travels have been through 'Jekyll and Hyde' and 'The War of The Worlds' in odd spare moments in restaurants, airports, hotel lobbies and even while in the Channel Tunnel! If you enjoy reading novels then this technique is quite indispensable - Ed.

Programmers' Workshop

by Andrew Baldwin

All change!

In the past few Workshops I've attempted to cater for a wide range of skills by including items that were (hopefully!) of interest to OPL beginners, along with others for more experienced Psion programmers. The next issue will see the start of a new 'Build an App' series - a 3 part tutorial taking you through the construction of a simple but useful OPL application. This series is aimed more at beginners (although in the last part there will be a few little tricks possibly of interest to old hands!), hence the focus of Programmers Workshop is going to change a little over the coming issues, with looks into programming tools plus general tricks and tips to help you write better programs.

Tools of the trade

Lets' kick off with a look at some new programming tools for OPL programmers:

ODE to Joy

It appears that Psion have finally embraced Windows™ with a vengeance. Firstly with the all-singing, all-dancing PsiWin, but secondly and of more interest to programmers, with ODE.

There is a vast amount of Series 3/3a freeware and shareware available, and this is primarily because of the built-in OPL programming language. The ability to develop software during those spare moments on the train to work is great, but writing any seriously sized program in OPL can become a chore. For starters, on a 3 or 3a an OPL source module is limited to around 40K in size, and secondly a module of this size takes considerably more than a few seconds to translate.

There was always the alternative of developing software using a PC text editor and then translating it using the PC based S3ATRAN program, but now Psion have made the PC alternative far more attractive with the recent release of ODE (Opl Development Environment) for Windows-based PCs.

To use ODE you need a PC running Windows 3.1, 95, NT, or OS2, a Psion machine (Series 3/3a or WorkAbout) and a serial (RS232) cable connecting the two together. The ODE software comes on one floppy disk and installs onto your

PC's hard disk with a standard setup utility. When you first run the program with the appropriate cable connected it attempts to connect to the Psion.

Writing a program using ODE requires you to create what is termed a 'Project'. This consists of all the various OPL source files required by your program, such as 'include' files, PIC files, WVE files, etc.

In the course of building your project, ODE goes through a number of stages. The first is to run your source modules through the OPL LINT program, which checks all your syntax and warns you about problems such as having more than one variable with the same name. If your program passes the LINT stage, it is then run through the correct translator. Translation in this way has an additional benefit as the program is first run through a pre-processor. This means that you can type additional commands into your source code to make it shorter, more readable and more organised, and often produce different versions of your program (including versions for different machine types) from the same code just by changing a single build option. For example, you could write some debugging code which you don't want in your final program, but which you want to include whenever you find a bug. By surrounding all the relevant code in something like:

```
#ifdef DEBUG
      <<debugging code>>
#endif
```

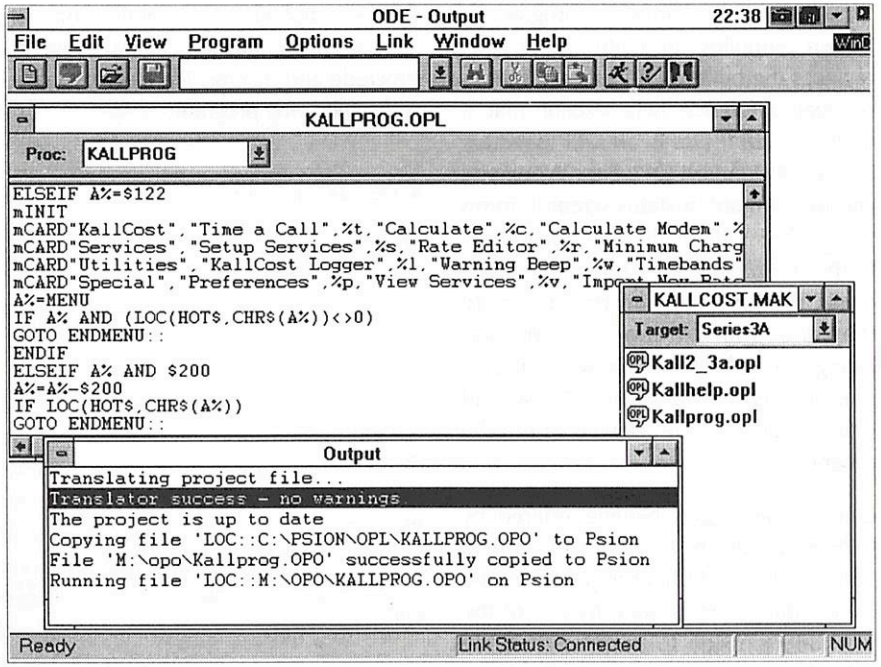
the debugging code can be included in your program whenever you tell the pre-processor to set the DEBUG flag. The pre-processor simply processes and removes all the additional commands before passing the resulting file onto the translator.

After translation, if there were no errors, the program is copied over the serial link to your target Psion computer and run automatically.

If you are used to writing OPL programs directly on a Series 3/3a then ODE will come as a bit of change. An OPL module on a 3a is just treated like a large text file with no distinction between individual procedures. When editing a module in ODE each procedure is displayed separately, with a selector at the top of the edit window allowing you to select any named procedure.

The editor is fully aware of all the available OPL commands and highlights your code accordingly in colour, making it much easier to follow. As well as having full on-line help on how to use the program itself, ODE also has an extensive Windows help file covering all aspects of the OPL language. This is extremely useful, particularly to the inexperienced programmer.

So what's the final verdict on ODE? Well, the plus points are that it allows more powerful programs to be developed, and with all the benefits of a large screen and keyboard. If you've already done some OPL work on a PC using a normal text editor then there is no question that ODE



is a vast improvement. If you're used to programming directly on a 3/3a then the position is not so clear: ODE will allow you to develop larger, more serious programs, but you will always have the time overhead involved in copying a program across the serial link to your Psion—something I find annoying. ODE also has no debugger, which is a pity as it would have made tracking down bugs in your code far easier, particularly since it is sometimes inconvenient to display debugging information on screen in large applications.

Personally I miss much of the immediacy of writing code directly on the machine, and you can't put a PC in your pocket!

In the UK, ODE is available directly from Psion, or from all Psion dealers at a cost of £29.95.

Who needs PCs?

If you don't have access to a PC, or like me you prefer programming on your 3a precisely because it *isn't* a PC then you may be disappointed that you're missing all the benefits offered by ODE. Not so, because now, thanks to genius programmer Andy Clarkson, one of ODE's biggest benefits, namely the pre-processor, is available in pocket-sized Series 3a form. This offers all the useful features previously available only to PC-based OPL programmers, but fully integrated into the Psion OPL environment.

'OPP', as this shareware program is known, supplies an editor 'alias' that replaces the built-in OPL editor. There is no real difference here except that it works on .OPP files in an OPP directory instead of standard OPL files. When you choose translate, a status screen informs you of OPP's status. If any errors (either in the pre-processor or translator stages) occur, then the program returns you to the editor with an error message indicating the problem. Finally, in the unregistered version, there is a 30 second delay before you are allowed to run the program.

One of the biggest benefits offered by OPP is the ability to break the normal 40Kb source code limit imposed by the Psion editor. This is done by use of the #include function to (surprise!) include extra files in your program. To the translator this appears just as if the extra code had been written in directly to the source file. Furthermore, if you are low on memory but have a large program to translate, you can just have a top level file that simply *#include*'s all your real source files and then translates that, requiring much less working memory.

Further benefits can be gained by the use of macros (the *#define* command). For example, you can replace obscure system calls with readable names. Also, by using header files which are #include'd, you can keep libraries of these macros, improving the general look of your source code and reducing the likelihood of creating bugs.

OPP is supplied with a whole army of header library files which make use of #include and macros. For example, look at the following program:

```
#include <os_buf>

PROC test:
   GLOBAL a(3),b(3)
   a(1)=1.1 : a(2)=2.2 :a(3)=3.3
   display:
   copy:
   display:
   GET
ENDP

PROC copy:
   LOCAL OSREGS
   BCOPY(ADDR(a(1)),ADDR(b(1)),24)
ENDP

PROC display:
   PRINT a(1),b(1)
   PRINT a(2),b(2)
   PRINT a(3),b(3)
ENDP
```

It's a trivial program that simply copies the contents of array a() to b(). Firstly, the library file os_buf.oph is included at the top of the program. The magic happens in the copy procedure. The OSREGS macro actually defines all the necessary variables for an operating system call. The BCOPY macro creates all the OPL code necessary for the built-in operating system buffer 'copy' function.

Now it would be easy to do the same thing in normal OPL without using OS calls, but imagine if the array was very large, this method would be far quicker—and look how simple it was!

OPP is highly recommended for any serious OPL programmers, brilliant stuff!

You can download OPP from the usual shareware sources. Registration (which removes the 30 second wait) is £10.

Call me up

Last issue I talked about Psion's Software Development Kit (SDK) and what an in-depth source of information it is. Unfortunately most people can't spare the £90 or so for the SDK documentation, so to help those of you in this position I'm going to start something of a regular corner explaining some of the useful system calls that might enhance your OPL programs.

There are two main OPL commands of concern when using system calls, namely CALL and OS. CALL is the easier of the two to use, but is less versatile and cannot be used in some cases. I'll therefore explain the use of OS instead:

System calls, being machine code, take their arguments in the 6 main processor registers, normally in the form of values or addresses (pointers). The values of these registers must be passed to the OS command, and this is done by giving the address of an area of memory containing 6 integers. Fortunately this process can be simplified by using a trick, which relies on the fact that OPL always allocates memory for variables in the order they occur in the source file. Hence, if you declare 6 local integers sequentially, they will be guaranteed to be in the same order in memory.

As an example of the OS function, let us rewrite the previous example in the OPP review, but using conventional OPL:

Remove the initial #define line, replace the copy procedure with:

```
PROC copy:
   bcopy:(ADDR(a(1)),
   ADDR(b(1)),24)
ENDP
```

and add the following two procedures:

```
PROC bcopy:(pfrom%,pto%,len%)
REM Buffer copy OS call wrapper
   LOCAL ax%,bx%,cx%,dx%,si%,di%,
   flags%
   cx%=len%
   REM  Number of bytes to copy
   si%=pfrom%
   REM  Address of buffer copying
   REM  from
   di%=pto%
   REM  Address of buffer copying
   REM  to
   flags%=os%:($A1,0,ADDR(ax%))
ENDP

PROC os%:(fn%,sub%,pax%)
REM OS function called by wrapper
   IF sub%<>0
      POKEW pax%,(sub% OR
      (PEEKW(pax%) AND $ff))
   ENDIF
   RETURN(OS(fn%,pax%))
ENDP
```

The OS procedure is what does the hard work. It is given three arguments, a function number, a sub-function number (often zero), and the address of the register values. The *bcopy* procedure is just a wrapper to provide a convenient programming interface to this particular call, and it would be re-written for each call depending on the arguments and possible return values.

Here are a couple more possible wrappers. Firstly, the buffer swap function:

```
PROC bswap:(pfrom%,pto%,len%)
REM  Swap the buffer at address
REM  pfrom% with the one at
REM  address pto%, buffer
REM  length len%
   LOCAL ax%,bx%,cx%,dx%,si%,
   di%,flags%
   cx%=len%
   si%=pfrom%
   di%=pto%
   flags%=os%:($A2,0,ADDR(ax%))
ENDP
```

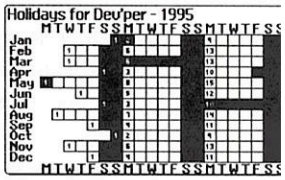
And here is another to locate a character in a buffer (although unlike the OPL *loc* function, it is not limited to 255 character strings):

```
PROC bloc%:(char%,pto%,len%)
REM Locate any occurrences of
REM character char% in buffer
REM at address pto%, length len%.
REM Returns offset of occurrence
REM or -1 if none
   LOCAL ax%,bx%,cx%,dx%,si%,di%,
   flags%
   local t%
   ax%=0
   POKEB ADDR(ax%)+1,char%
   cx%=len%
   si%=pto%
   flags%=os%:($A7,0,ADDR(ax%))
   IF (flags% AND 1)
      RETURN(-1)
   ELSE
      RETURN(ax%)
   ENDIF
ENDP
```

There will be more useful system calls next issue.

As usual, if you have any Psion programming related questions you can contact me through *Palmtop*, or directly as either baldwin@cix.compulink.co.uk, or andrew@zarquon.demon.co.uk or Andrew-Baldwin@psion.com.

Making a PLAN



The delights and perils of project planning. Graham Foster explains why you might need it and examines the best 3a software for the job.

Project Planning is structured guesswork. Like all computing, the quality of the information coming out is very dependent on the quality of information going in. Most *projects* can be broken down into smaller *tasks* that are linked together or have *dependencies* on each other. Building a house is a textbook example: a job involving many detailed tasks, but with a correct and logical order to their implementation:

- Clear the site: Obviously one of the first tasks to be performed.
- Prepare the foundations: no house can be built 'top down' They all have to be constructed from the bottom upwards, so foundations and preparation for utilities and drainage is important.
- Build the structural walls and floors: (allowing spaces for windows, exterior doors, etc.)
- Put on the roof, and tile it: the house is now more weatherproof and interior work can commence.
- Do all the interior wiring, plumbing, etc. and build interior walls, put in the windows, etc.
- Plaster, finish off and decorate.

Clearly, for any of these tasks you need to have a fair idea of how much work is involved and the dependencies between tasks. It also helps to know how many builders, plumbers, electricians, etc. (resources) you have and how quickly they all work.

Obviously this is a very broad brush outline and there is an implied order to the various stages. If you were building a house in a sunny climate there would be less of a rush to get the roof on, as interior work could continue in the sun. Also, if you have more builders available then certain interior and exterior work could be carried out simultaneously.

In addition to considering the order of tasks, a project planner must balance the correct level of detail. When building a house one must consider all the detail concerned with erecting walls in the right place, installing the bathroom suite in the correct orientation, ensuring that lights are correctly positioned, etc. These details are best left to an architectural plan and the builder's experience, rather than attempting to schedule each of the tiny activities. On a more macroscopic scale, the task of construction of the house is one of the final stages in the larger project: after first finding the land, drawing up plans, acquiring planning permission, finding suitable builders, etc. This is certainly within the remit of project planning, and should have been done and refined when the house project was first thought of.

A **project planning** tool allows you to take all the pieces you know about and the restrictions you are aware of (i.e. that walls come before the roof!) and link them together into a plan of implementation. You must know some sensible combination of the number of days work required to do the job, the start date, end date, or the work rate. 'Plan', the 3a project planner will calculate the unknown items for you. The more times you run an identical project the better your project estimating will be, but how many people have identical projects?

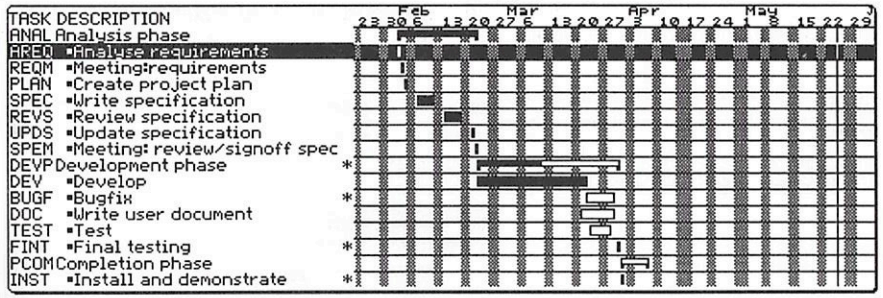
Plan helps to monitor the cost of a project by estimating expenses based on the work rates and equipment usage costs you feed into it. If you go as far as allocating rates of pay for contractors or payments for the hire of equipment, *Plan* will automatically provide you with an overall cost for the project and each individual task within it. Additionally, given the fact that your plumber has just told you that he is going on holiday for 2 weeks starting next week, *Plan* will help you to see what is likely to be delayed by his absence, whether you can afford the time, and whether you can afford the cost overrun of having equipment on hire for extended periods.

How will it be useful to me?

'But I don't build houses!' I hear you say. That is no problem. Any project that requires resources over a period of time in order to do a job can be put into *Plan*. You decide whether the effort of project planning is a benefit or an additional burden. If you are only looking at your own time then it's rarely worth being so formal in your time management. It is more useful if you are self-employed and allocate your time between several clients, in that it may prevent you from promising the impossible. If you are managing several staff then project planning can become a useful tool to monitor progress against objectives and provide some visibility of the management process.

The Software

After all the preamble, I will detail some of the facilities of *Plan* for the Series 3a. Let me say from the outset that *Plan* is aimed at moderately simple project planning problems. All you Channel Tunnel builders will have to find something a bit more up-market! Saying that, I do not wish to demean the substantial capability the author has managed to squeeze into this package. I have only encountered a couple of shortfalls with *Plan,* and they come back to my own failure to plan in sufficient detail for certain tasks.



The Gantt chart, at one of its four possible zoom settings

Installation and use

Installation merely requires you to copy files to the appropriate subdirectories as with any other Psion application. It is clearly documented in the accompanying user guide.

Plan comes supplied with its own example file from which the screen shots shown here are taken. This file illustrates many of the facilities available within *Plan,* so I suggest a little experimentation. The documentation and on-line help is clear and concise, covering all the functional aspects of the software. One of the few areas where *Plan* could be improved upon would be to put together a simple tutorial document with the package. This should explain the concepts of projects and tasks, start and end times, work rate, dependencies, etc. All the information is in the documentation, it is just presented functionally rather than from a tutorial viewpoint.

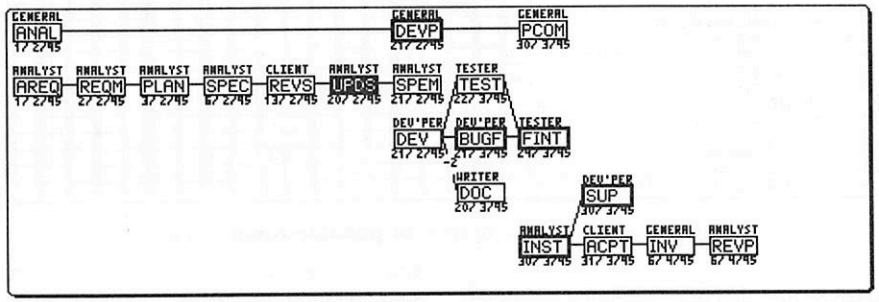
Gantt View and Task sheet

The Gantt chart is used to show graphically when a task will start, or how far it has been completed. The black part of a bar is the completed amount (as set by the planner), and the rest of the bar represents the remainder of the task scheduled.

Plan tracks tasks down to the nearest *second,* which is a feature of the way the software is implemented. I cannot believe that there are any real planning requirements for such accuracy! Holiday periods are shown as the vertical grey bars, and can either be generic (i.e. every Saturday & Sunday), or resource specific. This last feature is not even available on Microsoft Project™, perhaps the most

sophisticated of project planning programs.

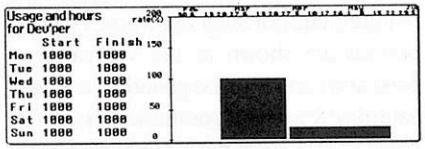
A complementary view to the Gantt chart is the task sheet which lists who is doing what, when, how much is done, and how much each task costs. This is a scrollable text list and can also be used for new task entry. This screen is essential in order to get to the actual detail of the plan.



A Pert chart

Pert Chart

This view illustrates the dependencies between tasks, and details of how the finish of one task controls the start of another. The Pert Chart is laid out automatically for you, although you are free to move tasks as required in order to clarify task relationships. This view is especially useful when you discover unexpected effects in your plan. These are normally due to you either trying to tie things down too much (i.e. you know the start and end dates of a series of tasks, and you know that only one person is doing them full-time—in which case why are you bothering to plan?), or that you have forgotten a dependency.



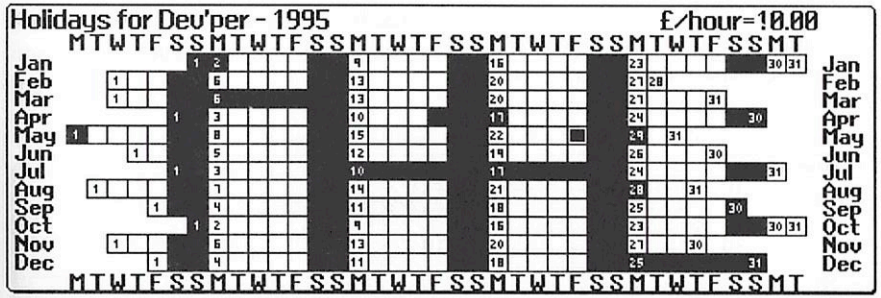
Resource view

Resource View

This shows how a resource (in this case the developer) is working at 100% usage on the main part of the project, then down to only 20% usage for the later stages. A resource can be a person, group of people or equipment, etc. If the usage of a resource goes beyond 100%, then hopefully you will have more than 1 of them, otherwise it's a classic case of poor management—too much work and too little time in which to do it! This view is particularly intelligent in that it takes into account the availability of the resource as well as its usage. There are no resource levelling facilities available within *Plan* at this time.

Holiday view

This shows the availability of resources during the whole year. The format is very similar to the year view of the 3a Agenda package. The calender spans 3 years from the current year, which should be sufficient time for most projects. A nice feature of *Plan* is that you can set up resources shared between projects. Therefore by setting a resource called 'General' and allocating it to public holidays (e.g. Xmas & Easter, etc.) these dates will automatically be set up for each new resource added. If your poor developer is being paid to work through Christmas then just make him available on those days—*Plan* will automatically adjust finish dates for you.



Holiday view

Feature List

Here is a cut down synopsis of the features available within *Plan* 3.1.3. It is intended as a quick guide to users of existing planning packages, who already have an idea of their requirements. (Acknowledgement to the author of *Plan*, Andy Clarkson, for the list in his user guide)

- A separate file for each project plan with either plan-specific or shared resources.
- Up to 200 tasks or activities in a single plan file, each task holds: ID, description, work resource, work rate, start date, end date, (calculation method), work done, labour and fixed costs, user floating point value, user text value.
- Task tracking: tasks may have up to eight dependencies with specified lag time for each dependency.
- Mask option to show which tasks are shown.
- Summary tasks (like Microsoft Project).
- Memo attached to each task, launches WORD from within Plan.
- Any number of resources (up to available memory), each with its own calendar and labour charge per hour.

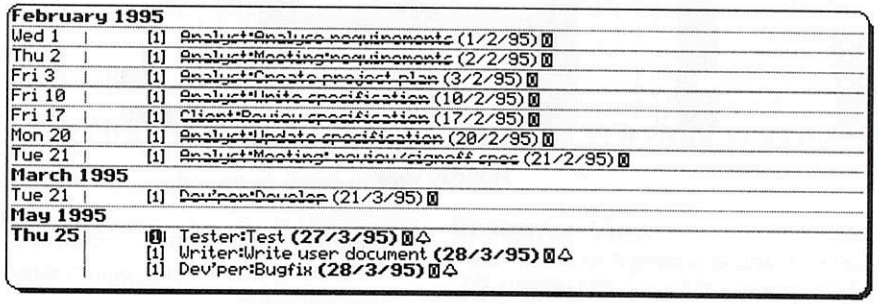
- Task, Gantt, Pert and resource views of a project.
- Calculation of the critical path of a project.
- Task sorting by a variety of attributes.
- Bidirectional transfer of plans between Microsoft Project and *Plan*.

Interfacing to Microsoft Project

The author has provided a very simple interface to Microsoft's 'Project' software for Windows and Macintosh users. *Plan* 3.1.3 quite happily imports and exports .MPX v1 files between the two systems, and I use this facility to develop my plans on the PC and then download them to the Psion and keep them updated. I feel this is the best way for me to work, as most of the modification and linking of tasks is best done under Windows™, where the screen size is not a limitation. Once formed, plans are easily updated on the fly and kept accurate with the Psion.

Agenda Interface

This was new in version 2 of the program and allows the whole of a project to be exported as an Agenda file to-do list with optional alarms and year view symbol. The results of this export are shown in the screen shot below. This facility can be used either to build separate agenda files for each project, or perhaps to merge these files into your main Agenda as separate to-do lists. Completed items are already configured as being 'struck through'. This is a nice touch.


February 1995
Wed 1 [1] Analyst:Analyse requirements (1/2/95)
Thu 2 [1] Analyst:Meeting:requirements (2/2/95)
Fri 3 [1] Analyst:Create project plan (3/2/95)
Fri 10 [1] Analyst:Write specification (10/2/95)
Fri 17 [1] Client:Review specification (17/2/95)
Mon 20 [1] Analyst:Update specification (20/2/95)
Tue 21 [1] Analyst:Meeting:review/signoff spec (21/2/95)
March 1995
Tue 21 [1] Dev'per:Develop (21/3/95)
May 1995
Thu 25 [8] Tester:Test (27/3/95)
[1] Writer:Write user document (28/3/95)
[1] Dev'per:Bugfix (28/3/95)

Importing into your Agenda

Postscript Interface

This final add-on to *Plan* allows postscript files to be generated directly from within *Plan* to output Gantt and Pert charts. I find the output to be particularly good, so much so that it is easier to get *Plan* to output your project on 1 sheet of A4 than it is for Microsoft Project. This file can be printed directly onto a postscript printer.

The competition

The only competitor that I am aware of is another shareware product called PROPROC. This has a registration fee of approximately 65 Australian dollars, and there is a 'commercial' version for approximately A$105. REPPROC comes in Series 3 and 3a versions, so is the only Series 3 'Classic' project planning package available at this time. I have not had the time to compare it in detail with PLAN because Proproc does not allow import / export to Microsoft Project, but the documentation says:

- The commercial version allows resources to be tied to locations, so that you cannot use a resource unless it is geographically available to you.
- Proproc appears to be stronger on budgeting, as projects can be assigned budgets and the commercial version apparently has links to the Psion spreadsheet to help with budgeting and cash flow analysis.

If you only have access to a Series 3 or you have a strong need for tight budgeting control of the projects then I suggest you have a look at Proproc. Speaking personally, I thought it was expensive, and not as easy to use as *Plan*.

Bugs & weaknesses of Plan

I find *Plan* very useful, and the shareware price (£10) makes it exceptionally good value for money. The author is constantly improving his product and is very responsive to suggestions for improvements. I have not been able to identify any bugs in this package to date.

The only limitation I now experience is *Plan*'s inability to handle tasks with shared resources, e.g. a task being shared between 2 people. The author has promised to add this feature into a later release.

For regular project planners, you may find the absence of baselining to be a problem (the ability to save a plan and compare how the project drifts in relation to it). There are also no facilities for resource levelling, but this is hardly surprising given the limited processing performance available under OPL on the 3a.

My overall rating of *Plan* is very high, especially if you are new to this type of software or you don't do a large amount of project management. It is also attractive if you can't justify spending several hundred pounds on a desktop package!

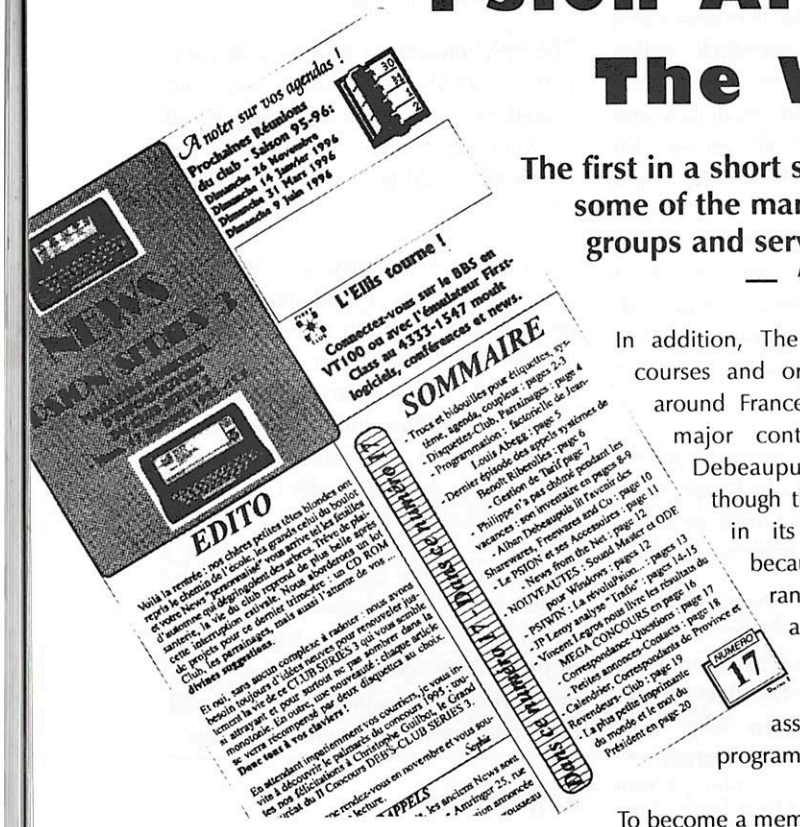
Registration

Registration costs £10, although for non-UK currency registrations Andy asks for slightly more to cover currency exchange fluctuations and foreign bank cheque clearance. After registering you will be sent a code to be typed into the registration screen. This will free up the 10 task / project restriction placed on the unregistered version.

Graham Foster

Psion Around The World

The first in a short series looking at some of the many Psion-related groups and services worldwide — 'CLUB SERIES 3'



Born two years ago, **'CLUB Series 3'** is a French user group of Psion Series 3/3a users. It currently has 800 members (mainly in French-speaking countries), and the 'Club' produces a well-presented 24 page A4 bi-monthly newsletter (in French), covering information and articles in a similar vein to *Palmtop*. In addition the club runs a BBS that holds a selection of shareware and freeware, together with an animated conference section (tel: +33 1 43 33 15 47).

In addition, The club holds training courses and organises meetings all around France. One of the Club's major contributors, Mr Alban Debeaupuis says that "Even though the Psion is somewhat in its infancy in France because of a general ignorance of the product, we are eager to develop international links with other users, associations and programmers."

To become a member and to receive the club magazine, contact Alban Debeaupuis at:

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Tel: +33 1 40 04 92 19
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E-mail: debeau@ellis.fdn.org

The annual subscription is 200 French Francs per year.

"On The Net"

The latest gossip from the Information Superhighway

Pete Sipple takes a look at what's being said in the various Psion on-line conferences. This time around, we look at passwords, Windows '95, shareware payments, and a war of words...

The Psion Series 4 - Buy now, or buy later?

"I've been thinking about purchasing a 3a soon. However, I'd hate to buy one and then find out that Psion will release a snazzy new 'Psion 4' in just a few months. Does anyone know if there are plans for the company to introduce a new palmtop in the near future, or is the 3a going to be their top-of-the-line platform for a while to come? Thanks in advance for your help."

Paul Hsieh (hsiehp@crl.com)

"I'm afraid that Psion are very good at keeping things hush before release. I would recommend to buy the S3a if it fulfils the following criteria: 1) It does what you want NOW 2) It is at a price you can afford NOW. Like anything electronic you can postpone the purchase because there WILL be something better out next year. (but don't buy then 'cause there will be something better out a year after that). I would bet a large amount of money that Psion are working on something better. This is what they DO - they make electronic organisers - of course they will be working on something better, they plan to be in business for the foreseeable future!"

(millar@cix.compulink.co.uk)

Don't drop it! In a battle between concrete and a Series 3a, who wins?

"Eventually I will upgrade to a better machine. But I have heard complaints that the 3a breaks more easily. I have dropped my old Series 3 on concrete and other hard places a number of times with no problems. Would the 3a accept such treatment? It seems that the batteries that jump out when I drop the Psion somehow absorb part of the impact. Is this a feature?"

Martin Bergendahl (martin@carmen.se)

"I think the fact that the Psion is travelling at 9.8m per second towards earth is what makes the batteries pop out !!"

(lewestc@fastnet.co.uk)

"Isn't it the fact that it is forced to stop rather rapidly that makes the batteries jump out?"

(msc9520@geovax.ed.ac.uk)

"No. Just as an airplane heading towards the ground too fast makes the parachutes "fall out". The batteries are escape pods for the gnomes. I have improved gnome safety in my Psion by carrying the whole thing in a padded leather wallet. When I drop it, the batteries stay in. QED."

Dr David J Pritchard (djp@ecs.soton.ac.uk)

Password protection on the 3a - Is it too secure?

"I have stupidly forgotten my password on my Psion. Is there any way I can get at that information, ie. is there a backdoor other than the remote link (which has been turned off)?"

(dip@cix.compulink.co.uk)

"Oh dear ..... I do hope there is someone who can help, but .. I have a bad feeling that the answer will be no! Good luck, and in the meantime relax, and the password may come back to you! When did you last back-up? If it was yesterday, or even over the past few days then you could do a hard reset (lose the password and all data), set a new password and set it to <off> and then restore the data from your last backup."

(dagriffiths@cix.compulink.co.uk)

"Can't Psion bypass this? I was under the impression that they could. If they can, I don't think that they would openly boast about it, but I am sure that I read something somewhere. Correct me if I am wrong!"

(snichols@cix.compulink.co.uk)

"There is no backdoor to the Password protection - it's a battery out job if you've forgotten it!"

(jboyce@cix.compulink.co.uk)

It's here! - After much media hype, Microsoft's new operating system, Windows 95™, is now available. Does it work with PsiWin?

"I just ordered PsiWin and as a second thought wondered if it will work OK with Win95. Anyone know?"

(kw@primenet.com)

"Yup, I've had it working with the final beta release (build 347) and the June test release (build 490)"

(philip@odinm.demon.co.uk)

"PsiWin works fine on Win95. So far the only difference is that it can't link to/from Schedule+ (we're still hoping/waiting for a 32-bit SPLUS.DLL to let us do this.)"

Nick at Psion (nhealey@cix.compulink.co.uk)

Emulating under Windows 95™?

"Will the Series 3a emulator run under Windows '95? The readme says that it won't run under Windows 3.x. Will we all have to run it from DOS floppies if we upgrade to '95?"

(gbrand@sagar.win-uk.net)

"Just specify that it should run in MS-DOS mode in the Advanced Program Settings screen of the Program Properties. Win 95 will unload itself and run the emulator. Then when you exit the emulator, your PC will reboot back to Windows."

(kam@piste.demon.co.uk)

The concept of 'shareware' relies on the honesty and conscience of users to pay for software that they find useful. One shareware author is rather disappointed with the response he's had...

"Although I'm happy that people are using the shareware program I wrote for the 3a (pstuner 2.0, which lets musicians use their palmtops as portable instrument tuners.), and I wouldn't want to have anyone STOP using it, the documentation clearly states that the program is shareware. Despite asking for ANY size donation ($1?, more?) for a non-profit charity and with over 250 people having downloaded it, you know how many people have sent in their shareware fees? Zip. Nada. No one. Am I at fault for not putting in annoying shareware notice screens that are only disabled once the shareware fee has been paid? While I don't EXPECT people to pay their shareware fees, I also didn't expect that NO ONE would. What percentage of users of a shareware program will or should pay shareware fees? 0-5%? 100% should. You tell me!"

(smike@best.com)

"My gut feeling is that as a very rough rule of thumb, and given a good, working program, only about 5% of people downloading an application will register it in the end. It varies wildly, of course! I could name three 3a programs by different authors which have EACH netted over 500 registrations, at over £10 each. So be encouraged, shareware does work, if the programs are good enough and if the nagging is done in the right way and if the authors are willing to be flexible in how they're paid, etc. Keep plugging away - try to get feedback from people who've tried your program."

(slitchfield@cix.compulink.co.uk)

"Part of the problem is the name 'shareware'. On the up-side, the name encourages people to distribute your program for you and eliminates advertising costs. On the other hand, when I share things I don't expect people to pay me for them. By adopting the name 'shareware' you get both the good and the bad"

(mrose@stsci.edu)

"A successful shareware program should be so good that people seeing it would

have made the effort to go and look for it in the shops had it been commercial. Also, it should not have disabled features - otherwise you're asking people to take a gamble on the missing features. Much better to put a limit on the project/file size or similar, and keep all the features in. That way, people can see the entire thing, but have to register in order to use it seriously. Nag screens are OK provided they are not offensive and don't have time delays on. As regards the money itself, the payment requested should be a reasonable quantity. Who is going to make the effort to stick a dollar - or even five - into the post? It's not worth spending the time and energy to do for such a small amount. Make the amount large enough so that people at least have to think a little first - and make the software good enough to deserve it. Finally, remember what it's like for people abroad. If foreigners cannot register by VISA card, or via CompuServe, or foreign cash, then most other routes are far too expensive to bother. Why pay your bank more than the software author? Don't be disheartened by your experience, there are people around who have made money through Series 3a shareware."

(jezar@cix.compulink.co.uk)

"For me, I'll pay for programs I can't live without. Most games and such don't hold my attention long enough to warrant getting out a check book. So I may be a slime sometimes, but at least I'm an honest slime."

(phudson@rohan.sdsu.edu)

... Since posting the original message, Bruce Linde (smike@best.com) has received several registrations for Pstuner.J45!

The Series 3a built-in spreadsheet is an excellent utility, but there's no built-in way to print the impressive graphs. As usual, other Psion users have found suitable software to do the job...

"How do I print out graphs from the spreadsheet program? Is there a utility somewhere that will let me do this?"

Jennifer Coston
(102427.2245@compuserve.com)

"There may be other (better?) solutions, but you may want to try PICPRI.ZIP (Screen Dump to Printer for 3a), in this forum's software library. This is a small utility to dump the current screen contents to a printer - useful for printing Spreadsheet graphics. It supports IBM, Canon, HP, and Epson printers."

Dennis Lefebvre, Forum Sysop
(71660.1273@compuserve.com)

"Jennifer, Picprint is fine but slow. There are two other possible ways to print out graph screenshots or diagrams, PicPoc by B. Daum, or Paint [by Purple Software]. These apps allow you to work with your pictures and add text."

Dr Jochen Reichel
(100046.163@compuserve.com)

"PSION: BIGGEST RIP OFF!" This opening line in a recent message has created what must be one of the longest running and most intense discussions in the history of the comp.sys.psion newsgroup.

A student named Jay B Biggerstaff won a Series 3a in a radio station competition. At first he was impressed with the "little computer", however, the excitement ran out when he saw the costs for upgrading it and the cost of the software. "$90 for a spell checker and the same for some sort of golf game? ". He called the radio station with the excuse that the machine wasn't working correctly, and could he exchange it for a bubblejet printer? Once the radio station agreed, he was happy, but felt he had to tell the Psion newsgroup what he really thought of Psion products. "...the add-ons are OVERPRICED RIP OFFS!!! Your product sucks and your company sucks until you can prove otherwise." The Psion newsgroup is populated mostly with Series 3/3a owners who are very happy with, and very proud of, their machines. JBB had started a 'flame war', the Internet equivalent of hatemail. Early messages about JBB being ungrateful at turning away a free Series 3a were met with sarcasm and abuse. Several posters agreed that yes, some Psion products may be overpriced, but the standard of software plus its popularity has ensured its continued success...

"Instead of a massive flame-war along the lines of 'you're more childish than I am', perhaps we should stop and consider that: a) You don't have to buy a Psion if you don't want to, and b) The large number of Psion users show beyond any doubt that the Psion is both a useful and liked machine."

"Abuse aimed at the Series 3a then changed to personal abuse as one innocent poster was flamed"

"This is the first time I have replied to a message that really made me mad. This guy is obviously a complete idiot and has NO understanding of the computer industry or of how well the Psion Series 3 is thought of."

In response... "I'm sorry... could you repeat that? I missed your desperate attempt at minor meaningless ridicule. Could you take your head out of your ass and say it again?"

Abuse aimed at the Series 3a then changed to personal abuse as one innocent poster was flamed with "You

strike me as the sort of person who probably lives alone, dates men (if you're lucky) and has nothing else better to do on the weekends except hold Psion Pep Rallies in your home."

One poster suggested that the 'gentleman' was unsubtly looking for people to play with and should be ignored. The reply was that this was the response he expected from someone who's feelings were hurt. "Maybe a new laptop would make you feel better. Like I said, I don't give a damn what you think."

"This abuse seems pointless. Did you get bullied at school and are now looking to get your own back?"

Mr Biggerstaff achieved his goal. He managed to incense a group of normally calm and polite Psion users to fever point. One poster signed off his message "from the freezer... whilst I cool off".

"You really are a sad character, Mr B*ggeredstiff, but I must say that I, for one, find your musings quite amusing - childish, but amusing. I sit here day after day with baited breath awaiting your next post. Please, please, please post another one, I just can't wait!"

At the moment, things have gone a little quiet as far as JBB is concerned... I, for one, am waiting nervously for Round Two...

Files and Psion related discussions can be found on CIX and CompuServe. For those with Internet access, files can be downloaded from the FTP site at src.doc.ic.ac.uk/packages/psion.icdoc . Psion discussion also takes place in the Usenet group COMP.SYS.PSION.

Pete Sipple
(psipple@cix.compulink.co.uk)

Classifieds

For Sale:

PsiWin software (with manual) - £25

Pipemania game (for Series 3 or 3a) - £15 (boxed with manual)

Psion Games Pack 3 for Series 3 (with manual) - £10

Psion Chess for Series 3 - £10

All prices include postage, contact Vic Marden on 0171 771 5720 (home) or 01883 622802 (work)

512K Series 3a with 256K flash SSD and Psion 'Money' financial software on SSD. Complete with all manuals plus 'Serious Programming on the Series 3a' book **(as reviewed in issue 3 of *Palmtop* - Ed.)** All items in excellent condition - £200.

Contact Boris on 01268 747565

Send your 'for sale' ads to the editor.

A Case for the Defence

...The defence of your Psion, that is. The first half of a two-part feature on the best cases, wallets and holsters for your Series 3. This time we examine some of the more luxurious offerings on the market...

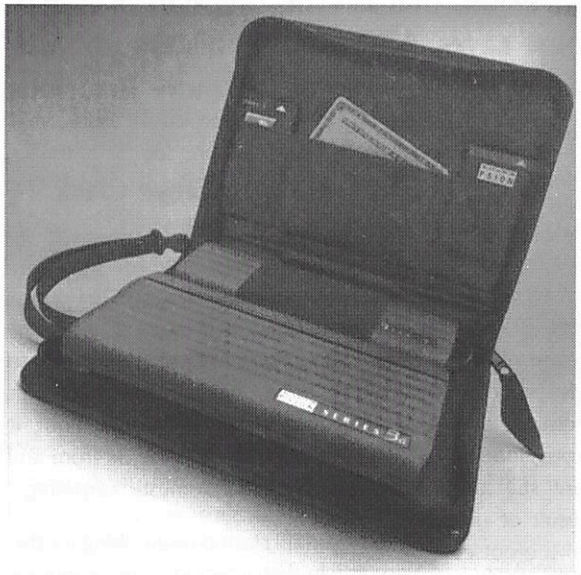
By Steve Clack

I've sometimes thought it a little odd that the Series 3/3a is supplied without a case of any kind. A cheap calculator-style slip case would cost very little to produce, and would offer at least some protection for your investment. If there are still any users out there who as a result of not being supplied with one from the outset still insist on carrying their palmtop computer 'au naturelle'—without any form of case or protection, then be warned that you are probably putting your Series 3 at risk unnecessarily. Even a simple 'slip' case will offer a useful degree of protection beyond a bare 3a. Some months ago I arrived home from work, slung my jacket over the banister of a first floor landing, only to see my pride and joy fall out of the inside pocket to bounce unceremoniously to the foot of the stairs. Whereas my simple leather sleeve case wouldn't have given much protection against a hard tiled or wooden floor, it did in this instance save the 3a from any harm on my typical domestic carpeting.

It wasn't until I started researching for this very article that I started to get a feel for what a large array of cases are available for our humble little black box. In this issue we'll look at some of the more elaborate (and more expensive) examples of what is available. These generally offer storage space for more than just a bare 3/3a machine, and all those reviewed within the next few pages offer plenty of protection and padding to save your computer from damage.

Zip case-S3a/3Fax Modem (New World Technologies)

A Rolls Royce (or perhaps Cadillac) of a case this one. Made in the U.S.A. and distributed by New World Technologies, Inc., the external dimensions when closed make it about the same size and thickness as six issues of *Palmtop* stacked together. In other words, it makes your previously small and compact portable

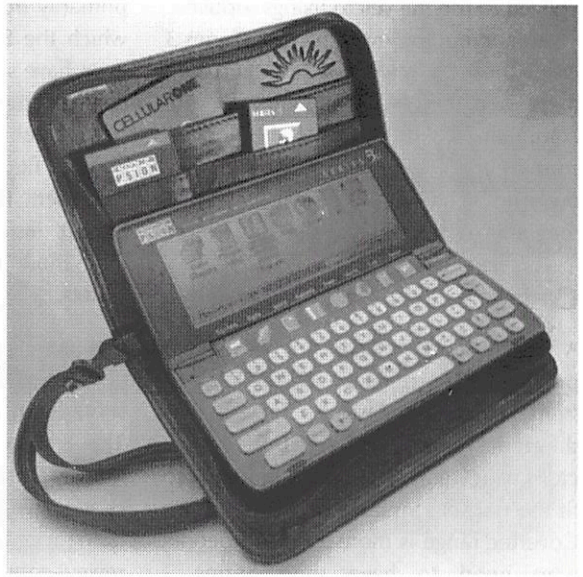


computer into a much more sizeable package altogether. So, what is the benefit of all this additional bulk and weight? Well, firstly this case is unique amongst the products under comparison here, in that it is designed primarily for those lucky enough to own both the Series 3/3a and Psion's own 3Fax fax modem (as reviewed in issue 3). The whole case is designed as a complete 'workstation in a box', allowing for storage of not only the computer and fax units, but also a couple of 3.5 inch floppy disks, 2 SSDs, a pair of spare AA batteries (or a pen), and it has a small document pocket for papers up to around 130mm x 190mm in size—alas too small for a copy of Palmtop!

In common with the smaller 'Zip case-S3a' the 3a is actually held in place on one side of the case by two 20x40mm velcro pads that mate onto a large velcro panel on the case interior. This is a perfectly practical proposition so long as you don't object to attaching a couple of sticky pads on the bottom of your Psion, and provided you remember to apply a little downward force each time you 'stick' the computer in place then you should never have to worry about it coming unstuck—with the obvious consequence.

The 3Fax is fixed into place by an elasticated band designed specifically for it, and with the case opened the Series 3 can be opened up and used with the 3Fax positioned discreetly behind the 'lid' of the computer. The 3Fax cables can be permanently attached in this configuration, and indeed the two devices need not be separated at any time.

In summary, this is a particularly attractive case that is well-made and offers the maximum reasonable protection for your expensive computer and peripherals. The large size necessarily compromises the otherwise inherent portability of the Series 3, but if you need to carry a 3Fax with you at all times then the other alternative is probably an untidy bag full of cables and bits. With portability being compromised in this way it's a shame that the manufacturers didn't make it just a little bigger to allow for the storage of a few more additional items such as a couple of overseas telephone adaptors, more than just two SSDs, and perhaps even a serial or parallel link cable.



The only blemish on an otherwise excellent quality of construction is the wrist strap, which is held in place with a rather cheap looking moulded plastic ring. In fairness it does look adequately strong, but it is not up to the level of finish shown by the other components.

Zip case-S3a (New World Technologies)

This is simply a smaller version of the larger 'NWT' case, without the space for a 3Fax. The whole package is rather more manageable than its larger brother, but as a result it will only carry a single SSD and one floppy, plus the same battery/pen loop as the larger case. Again a document pocket is included, but accepts smaller sheets up to around 90mm x 150mm in size.

As with the larger case, this one offers lots of protection with its well-padded sides, closed by a wrap-around zipper on three sides. I really got the impression that I could have thrown this case at a brick wall without damaging the contents within. This is not to be recommended (just in case), but serves to give some idea of the solidity of these two cases. Again, the strap loop is in tacky plastic, while the rest of the case just speaks quality.

A final point to mention on the two 'New World' cases is that you are almost

obliged to use the velcro fixings supplied. If you attempt to simply put your Series 3 inside these cases without the velcro then there is a dangerous tendency for the computer to slide out onto the floor as soon as you unzip the case. This is obviously not the way the designer intended the cases to be used—so don't try it!

Covertec cases

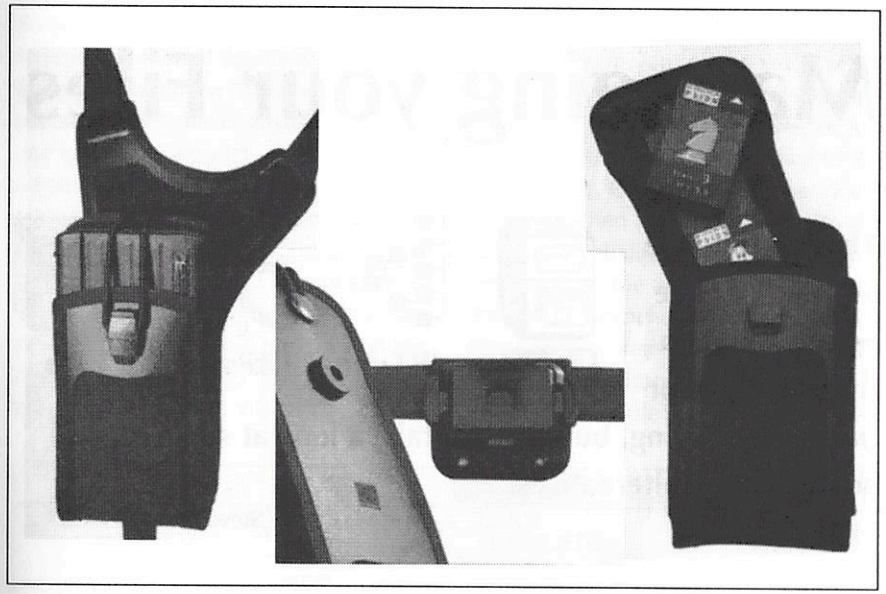
A completely novel concept in Series 3 protection, these beautifully made cases from France are designed for a rather different market. Whereas the other cases reviewed are designed primarily to fit the pocket, handbag or briefcase, the Covertec range is more suited to people who need to have their Series 3 constantly to hand while leaving both hands free and giving complete mobility.

The Covertec comes in two 'flavours', one being a pouch with a stud-fastening fold-over top, and the other being an almost identical form, but with an open top and an elasticated strap that pulls over the open top of the case in order to prevent the contents from falling out. This strap is fitted with a small plastic clip that slots into a mating hole on the front of the unit. Pressing down on the closed tab instantly releases the elastic cover, with the Series 3 now ready to be slipped out. This works superbly well, though the top few centimetres of the Psion are of course left unprotected in this configuration.

Both cases also include a clever padded insert to hold two SSDs. These are made primarily from a foam-like material into which the SSDs slot perfectly, and they even have small cutouts so that the disks can be removed easily. These inserts can be left behind if not required, and the Series 3 fits neatly either with or without the insert. Both cases also have a small pocket inside, though these will hold little more than a few credit cards or tickets.

The most slick aspect of these cases is perhaps the additional belt loop and shoulder holster included as standard. These allow either case to be snapped quickly on or off your body or belt with a neat locking clip arrangement (though I didn't receive a shoulder holster with my review copy in order to try it out). A small round spigot on the back-side of the cases simply pushes into a recessed plastic block in either the separate belt loop or shoulder holster. The case can then only be removed by pressing together two plastic 'ears' on the sides of the loop or strap. This gives complete security against the case accidentally jumping out of the holder, and is quick and efficient to use.

Unlike all of the other cases on test, the Covertec range is manufactured from the tear-proof and rugged Cordura™ fabric with a vinyl-like plastic trim and stitched nylon-like fabric edges. Don't be put off by the use of these non-leather materials or by the use of plastics, as the overall appearance is quite superb and obviously built to last a lifetime.



Though perhaps a little unconventional (and certainly not cheap), these cases are undoubtedly the best solution for anyone working on a building site, taking data in the outback/jungle/rain forest, or for anyone who likes to take their palmtop on rock climbing expeditions—it's just a pity they're not waterproof too! I reluctantly gave back my Covertec samples at the end of this review, and was left wishing that my life involved pursuits rugged enough to warrant the purchase of one. I may take up bungee jumping yet...

The Covertec cases are also available for the Workabout range, where there ruggedness is even more applicable.

In the next issue we look at some of the more conventional cases on the market.

InfoBOX

The Zip case-S3a/Fax Modem is priced at around £49 + VAT, and the smaller Zip case-S3a at £39 + VAT. They are both available from selected dealers in the UK (Try Clove Technology on 01202 302796, or direct from New World Technologies in the U.S.A. on +1 212 941 4633).

The Covertec flip-top case is priced at £39.95 inc. VAT, and the elasticated top version at £38.95 inc. VAT, both including belt hoop and shoulder holster. These are available again from selected UK sources (try Widget Software on 01438 815444).

Managing your Files

The built-in 'File Selector' on the Series 3 and 3a may be okay for basic file copying, but here we take a look at some more sophisticated alternatives...

By Steve Clack

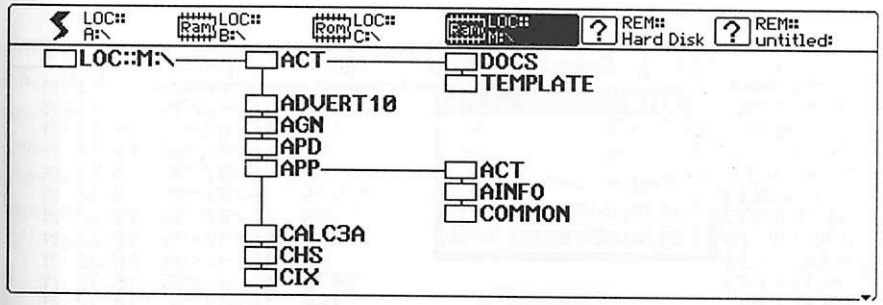
The built-in 'File Selector' on the Series 3 and 3a's is the sort of software you may well take for granted. A quick press of the <tab> key from anywhere in the system screen and up it pops: allowing you to quickly copy or delete files, rename them and create or delete subdirectories to your heart's content. And what else? Well, apart from viewing a file's attributes (a rare requirement, in my experience), the answer is 'not very much'. The convenience of the 'one touch' access to your files is not matched by what you can actually do with them once they're in view. The inability to even zoom the font size means that only seven files can be viewed at any time, making heavy use of the cursor keys *de rigeur* when traversing file listings of any decent size.

The most obvious omission from the program is any facility to *move* rather than simply *copy* files. Moving one or more files from within the File Selector requires two distinct operations: firstly the file(s) must be copied to the target disk or directory, then you are forced to go back and delete the originals from the so-called source directory as a separate step. Apart from this, the selector has no facilities for locating a file by specifying its contents, does not allow files to be viewed by attributes such as size or creation date, gives no summary information on the drive being viewed, and has no printout facility to get a hard copy of your directory tree structure.

We've been trying out four alternatives to the File Selector: three freeware and one commercial package.

So which file manager is for you? If you have never noticed the file selector to be lacking or limiting in its features then you probably don't need anything more. If you spend any amount of time trying out some of the hundreds of shareware and freeware programs available then the chances are that you perform quite a lot of copying, moving and manipulating of your file directories. In this case you have probably either torn out most of your hair already, or else tried out one of the programs mention in this article.

lighting one of the drive letters on the top of the screen you can quickly select another drive by either using the left and right arrow keys to switch drives, or just press the letter key corresponding to the drive letter. One touch of the down arrow key then moves the cursor to the root (top level) directory of the drive, and you then use the arrow or letter keys to traverse the branches of the tree. Pressing the <enter> key while on a directory will give you a list of all the files within it, and once a little pre-configuration is



Purple Software's File Manager 3.01F

Purple Software File Manager 3.01F

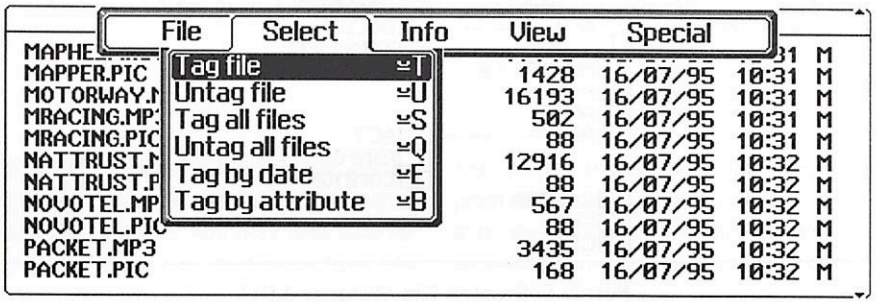
As described in the 'ToolKit 1' review on page 16, the latest version of Purple's file manager is bundled with this useful package. I have been using the Purple file manager for a few years now and have always found it a pleasure to use. Upon opening the program you are presented with a neat graphical interface showing all of your 'drives' in a row along the top of the screen and a scrollable 'tree' showing the directory structure of the selected drive. When the cursor is highdone then pressing <enter> on the actual file will launch the program relating to the file and allow you to work on it directly.

Setting up this auto-launch facility requires you to add some simple text commands to a configuration file if you want to launch more than a basic array of file types, by simply 'associating' each three-letter file extension with a specific application file. This is really the weak point of File Manager, as although a one-off job, the process is a little tedious, is poorly documented in the otherwise

reasonable manual, and appears not to work with certain file types. Apart from this annoyance, the remainder of the program works quickly and intuitively, and drive, directory and file views can be independently zoomed to your personal preferences. All settings are preserved when you close down the program, so there's no need to reset things the next time you use it. The ability to view up to 15 files at a time saves a lot of unnecessary scrolling, and all file sizes, creation dates, times and attributes are automatically shown next to the file name.

The most obvious functions such as copying and moving of files are all covered of course, and files or directories can easily be renamed or deleted, and you can change file attributes and dates to your heart's content.

File Manager is the only program in the review to offer any kind of printing ability, and this is done via Purple's usual print interface, which gives a neat page preview feature and a good selection of printer drivers to cover most people's requirements. This allows you to get a



File Manager in List View

File lists can be viewed in forward or reverse order of name, extension, date, time or size, and you can also set it to list only files that match specific filename criteria. If you're still having trouble finding what you want then you can search for specific text within a file, as described in the ToolKit review on page 16. For anyone interested in such things you can also view files within the machine's internal ROM, though they cannot be copied or moved.

useful hard copy of either directory structures or entire file listings.

The final major feature of the File Manager is the ability to get comprehensive disk statistics on each drive. By invoking the appropriate dialog boxes you can find out the battery state of your RAM SSDs, the exact free space on each

Disk statistics	
Size	4194304
Free	145081
Used	3885936
Recoverable	163287
File count	666

Disk statistics

drive, the space occupied by your files, the number of files within each drive or directory, and the percent of disk space taken by the files in each directory. The most useful feature here though is the direct readout of the amount of recoverable space on a Flash SSD. This lets you quickly ascertain whether you should reformat the SSD in order to free up some storage space, and saves you from trying to calculate the recoverable space by subtracting the 'free space' from the 'used space' to arrive at the figure. As far as I am aware the Purple File Manager and JBTree are the only programs to offer this useful feature—something that should most certainly have been included in the Psion machines from the very beginning. The program takes around 80K of disk space, and is the only program in the group to run on the Series 3 'Classic' (256K version only).

lation tools of the Purple Software program, but without the print facility and the depth of statistical information on the state of your disk drives. The generally good range of features is badly let down by the speed of the program, which I found to be frustratingly slow when moving around the directory trees of large SSDs.

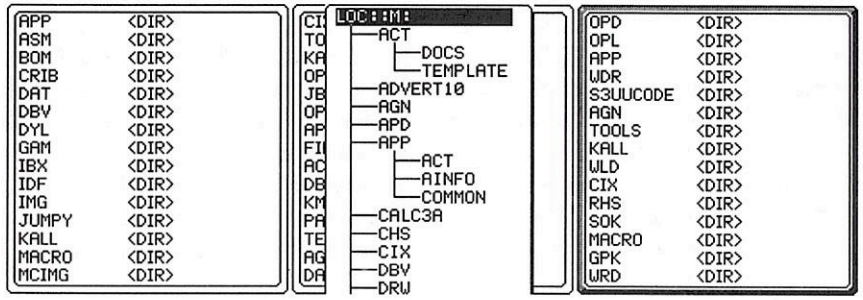
I find most of John's software offerings (particularly JBData and JBLaunch) to be quite superb, but when compared with the slick and fast interface of the Purple Software File Manager JBData appears both slow and crude. I must quickly temper the statement with the fact that the former costs a significant amount of money whereas JBData is entirely free. This may be of overriding importance to many users, who may consider paying £50 for a means of moving their files

JBTree's file and directory view

JBTree 4.2.4a

Written by the prolific shareware author, John Boyce, JBTree gives a simple representation of the directory tree on screen, and offers most of the basic file manipu-

around to be an undesirable and unnecessary expense. JBTree takes around 40K of disk space.



Utils 3a - multiple windows and a directory tree

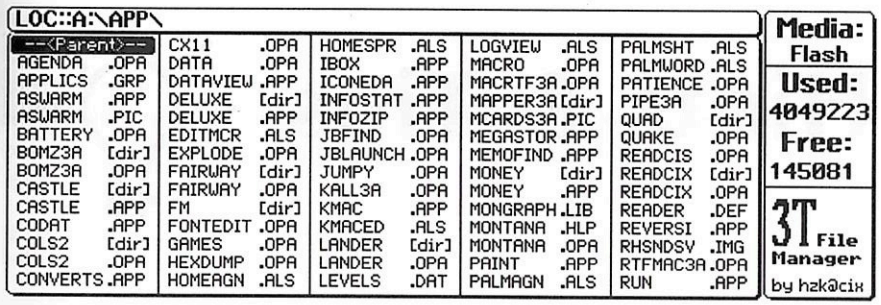
Utils 3a - v2.3

Written by G P Tappenden of Psion GmbH in Germany, Utils 3a uses a slightly different approach to the previous two programs, in that it offers the useful facility to view up to six windows simultaneously, each showing a different drive or directory. The process of setting up and sizing these windows is a little long-winded, but otherwise makes for a logical interface, as it is then particularly easy to copy or move files or directories between windows. Utils 3a is much more attractively presented than JBTree, but again suffers from a frustrating slowness. This is particularly noticeable when updating directory information, when many seconds often elapse before the file listing is finally displayed. Utils 3a can also show a graphical directory tree (see the screen shot at the top of the page), but this is very slow to appear for large SSDs. The file search and disk statistics are less comprehensive than those of JBTree, but it has a usable file launch facility and otherwise has a good range of basic facilities. This is a well-conceived program, but as with JBData I found the slowness to make it just too painful to use. Utils 3a takes around 45K of disk space.

3T (v 1.22)

Created by Roger Muggleton, the simple 3T file manager allows up to 70 files or directories to be viewed in a simple five column display, and can copy and move files, create directories and rename files (but not directories), and launch files as with the other three programs—that's everything. The main benefits over the built-in file selector are the ability to move files without separately deleting the originals, and the fact that you can view a good number of files without having to scroll.

Unusually for a 3a application, pressing the <menu> key has no effect, and the few options available within the program can only be viewed by pressing the <help> key to get a single help screen showing the keyboard shortcut for each operation. Despite the simplicity of 3T it runs admirably fast, and offers a good proportion of the functionality of the



Simple but fast - 3T

other three packages in a small and compact program. If you want something just a little better than the basic file selector then 3T may be for you. It takes only 11K of disk space and it's free!

Summary

A final point to bear in mind is that however good your Psion file management software, it will generally be easier and quicker to perform most of your file copying and moving from the full-sized computer attached to the other end of your 3Link cable. Programs such as PsiWin and Psion Link offer easy drag-and-drop of your files on a big screen with a minimum of fuss and bother. My own 3a usage requires that I tend to dump whole directories full of shareware into my Psion without putting the individual files into their correct directories first. I then use Purple Software's File Manager to sort and install the software properly during spare moments while I'm on the move, then deleting them afterwards as necessary. For my own requirements I would never consider life without the Purple File Manager, and find that its speed, convenience and facilities make it the single most important software add-on for my 3a.

Steve Clack

InfoBOX

The Purple Software file manager is supplied as part of their ToolKit 1 package on flash SSD, at £49.95 including VAT.

The other three packages reviewed are all freeware, and are available from the usual shareware sources under the following filenames:

JBTRE4.ZIP (JBTree v4.2.4a)

UTILS2.ZIP (Utils 3a v2.3)

3T_5F.ZIP (3T v1.22)

Next Issue...

Planned for issue 5:

- Contact management on the 3a. ACT! versus Contact Edge.
- Notepad. One of the most ambitious pieces of 3a shareware produced to date—an in-depth appraisal.
- The WORLD in your hands. Making the most of the built-in global database.
- The first in a new series on getting to grips with the Series 3a word processor.
- Writing shareware for the Psion. Some practical tips from Steve Litchfield, a shareware passmaster.
- Reviews of the latest and best in software, and more...
- All this PLUS the usual features, and some brand new ones too...